ARMY MEDICAL LIBRARY
WASHINGTON
Founded 1836

10

LIBRARY OF THE SURGEON GENERAL'S OFFICE
U.S.
WAR DEPARTMENT

AMEX

Section Gynecology
Hist

Number 369783

GPO 3—10543

FORM 113c, W. D., S. G. O.
(Revised June 13, 1936)

DUE TWO WEEKS FROM LAST DATE

L AUG 2 6 10E!

GPO 16—71341-1

SEXUAL

PHYSIOLOGY OF WOMAN.

EXPLANATORY.

Some explanatory words to the wide and ever widening circle of readers of the three great scientific and popular medical works issued under the auspices of the Peabody Medical Institute, and which are severally entitled "The Science of Life," "The Sexual Physiology of Woman," and the "Treatise on Nervous and Mental Diseases," seem necessary in this place, to prevent misapprehension. Dr. A. H. Hayes, the author of these three works, which have obtained such a wide celebrity and popularity, is still at the head of the Peabody Medical Institute, and its Chief Consulting Physician as well. And while he continues the practice of his profession, he will continue to occupy the position. The Peabody Medical Institute is a fixed fact among the medical phenomena of this country, and it will remain so. It is established on a permanent basis, and endowed with ample funds in addition to a constantly in-

creasing income, as its facilities for the cure of the special forms of disease to which it is devoted become more widely known. But there is a limit to the activity of any single person, however energetic and untiring he may be. This limit Dr. Hayes found some time ago, and he has been compelled, in consequence of the innumerable consultations crowding on and soliciting his constant attention, to withdraw entirely from the business management and outside affairs of the Institute, which he has intrusted to an assistant and pupil of his, Dr. W. H. Parker, a skillful physician, who may be consulted in strictest confidence on all diseases requiring skill and experience. This explanation has been rendered necessary, because letters are continually received at No. 4 Bulfinch Street, the address of the Peabody Medical Institute, inquiring if Dr. A. H. Hayes is still its Consulting Physician, with a view to having recourse to his advice and medical treatment. This explanation is therefore to certify that Dr.

Hayes is still to be found, as formerly, at the location and in the position where his skill has been so often available. With the exception of a short tour abroad, undertaken partly for purposes of recruiting, and partly for the purpose of investigations in the line of his profession, Dr. Hayes's connection with the Institute has been unbroken.

Those desirous of purchasing his three popular works aforesaid, will therefore understand that they are advertised to the public over the name of Dr. Parker, as the business agent and medical assistant of Dr. Hayes; and the works so advertised are his genuine works.

PHYSIOLOGY OF WOMAN,

AND

HER DISEASES;

OR,

WOMAN,

Treated of Physiologically, Pathologically, and Esthetically.

WITH

EIGHT ELEGANT ILLUSTRATIVE PICTURES

OF

FEMALE BEAUTY.

BY

ALBERT H. HAYES, M.D.,

Author of "Science of Life;" a Treatise on Diseases of the Throat and Lungs;
Consulting Physician of the Peabody Medical Institute;
late Surgeon of the U. S. A., etc.

Honored be woman! she beams on the sight,
Graceful and fair, like a being of light;
Scatters around her wherever she strays,
Roses of bliss on our thorn-covered ways,
Roses of Paradise, gathered above,
To be woven and twined in a garland of love!

SCHILLER.

BOSTON:

PUBLISHED BY THE PEABODY MEDICAL INSTITUTE,

No. 4, BULFINCH STREET.

WF
H191e
1869

Entered, according to Act of Congress, in the year 1869, by

ALBERT H. HAYES,

In the Clerk's Office of the District Court of the District of Massachusetts.

0.8.1

CONTENTS.

Page.

PRELIMINARY REMARKS 15

CHAPTER I.

INTRODUCTORY — WOMAN 26

The Woman's Rights Question — The Author's Stand-point purely Physiological and Professional — Peculiar Hardships of Woman — Character of our Current Life — Object of the Present Work — Woman's Sphere — Woman's Destiny.

CHAPTER II.

MYSTERY OF LIFE 34

Whether Adam and Eve had a Navel — The Greatest Mystery — The Beginning of Life — God still continues to Create Species.

CHAPTER III.

MARRIAGE, ITS PHILOSOPHY AND HYGIENE 45

The Principle of Sex runs through Nature — Marriage the Foundation of the Family and the State — Why People do not Marry — No Genuine Life for Man without Woman; and *vice versâ* — Modes of Courtship — Value of Beauty to Woman — Quotation from Milton — Marriageable Age of Women — Author's Opinion.

CHAPTER IV.

BEAUTIFUL OFFSPRING 65

Elizabeth of Brunswick; her Beauty — Mothers should be Surrounded by Beautiful Objects of Art — Beauty begets Beauty — Effects of Christianity on Personal Beauty.

CHAPTER V.

Page.

PUBERTY 79

The Young Girl at Puberty to be Closely Watched — Boarding Schools and Licentious Novels.

CHAPTER VI.

MENSTRUATION 84

Physiological Definition of Menstruation — Woman an Invalid Fifteen and Twenty Days in each Month — Premature Puberty — Age of Menstruation varies — Suppression of Menses; Causes of — Obstruction from Malformation.

CHAPTER VII.

MATERNITY (PHYSIOLOGICALLY CONSIDERED) 103

Conception — Transmission of Qualities — Quickening — Duration of Pregnancy — Parturition — Natural Labor — Unnatural Labor.

CHAPTER VIII.

EMBRYOLOGY 122

The Fœtal Child — Nutrition of — Monstrosities — Mother's Marks.

CHAPTER IX.

INFANCY 135

The Period of Infancy — Changes after Birth — Great Mortality in Infancy — Cities Deleterious to the Young.

CHAPTER X.

ABORTION 144

Induced Abortion Nullifies the Purposes of Deity — The Maternal Instinct — Maternity Unfashionable — John Stuart Mill's Opinion of Progeny and Love between the Sexes — Dr. H. R. Storer's Prize Essay — The Confessional Saves Thousands of Infant Lives — Serious Consequences of Abortion, Moral and Physical — The Production of Abortion a Felonious Act — More Dangerous than Ordinary Child-bed — Ignorance as to True Character of Wilful Abortion.

CHAPTER XI.

Page.

BEAUTY: ITS VALUE TO WOMAN 162

The Sort of a Woman to Marry — Sidney Smith's Opinion — Domestic Happiness and Good Looks — Milton's Eve — Madame de Stael, and Mary, Queen of Scots — What makes Beauty — Bulwer Lytton's Opinion — Hysterical Wives.

CHAPTER XII.

GENERAL HYGIENE OF WOMEN 167

Women Sensitive to Atmospheric Changes — Stimulating Food and Drinks to be avoided — Perfumes Deleterious — Influence of the Passions and Feelings on Health — Rural Pursuits — A Quotation from Michelet's "Woman."

CHAPTER XIII.

MAGDALENISM; OR, THE SOCIAL VICE 177

Remarkable Ignorance of the Subject — Society Discourages Investigation — Prostitution has Tainted the Blood of the Race with its Diseases — Prostitution in the United States — Our late Civil War increased the Vice — Perils and Shortness of a Courtesan's Life — More than Two-Thirds of the Courtesans Diseased — Possibility of Checking the Social Vice.

CHAPTER XIV.

THE SOCIAL SCOURGE (HISTORICAL) 195

The Venereal Plague — The Fifteenth Century — Naples, in 1495 — Superstition in regard to Origin of Syphilis.

CHAPTER XV.

MISCELLANY 200

Youth — Disappointed Love — Early Betrothals and Long Engagements — Corpulence — Marriage Excesses — Solitary Vice — Ignorance among Married People — Author's Experience — January and May — Sexual Attraction.

CHAPTER XVI.

SEXUAL LOVE 214

Object of Sexual Love — Wrong to Propagate Misery — Nature's Cunning — Prevention; when Proper.

CHAPTER XVII.

Page.

THE CHANGE OF LIFE 219

A Delicate Period — Quack Medicines to be avoided — Should avoid Crowds and Feather Beds — This Period passed — Prospect of a Long Life — Early Infractions of the Laws of Health Punished at this Time.

CHAPTER XVIII.

THE SEXUAL FEELING IN WOMAN 225

The Sexual Feeling in the Female in Abeyance — A Vile Aspersion — A Modest Woman.

CHAPTER XIX.

PREVENTION OF CONCEPTION 230

A Mooted Question — Author's Experience — A Dangerous Doctrine.

CHAPTER XX.

DRESS, CLEANLINESS, COSMETICS 234

Dress — Fallen Decency — Sudden Changes of Garments — Dress of Females should be Loose — The Corset a Support — Tight Dresses — Effect on Heart and Lungs — Fashionable Dress and the Organs of Maternity — Quotations from Distinguished Female Writers — Costumes for different Styles of Beauty — Fresh Water as an article of the Female Toilet — Modern Cosmetics — Mostly Hurtful — Belladonna — The Mystery of Cleanliness.

CHAPTER XXI.

THE HYSTERICAL MALADY 250

The Womb, the Starting-point of Hysteria — Predisposing Causes of Hysteria — Women subject to Hysteria — Symptoms — The End of the Fit — Treatment — Green-sickness — Erotomania.

CHAPTER XXII.

THE FEMALE SEXUAL ORGANS 270

CHAPTER XXIII.

BARRENNESS 283

Two Kinds of Natural Barrenness — Impotence; Causes of — Falling of the Womb — Sterility or Barrenness, Causes of — Sterility in Prostitutes — The Use of Aphrodisiacs — Their Effects commonly Injurious — Treatment — No Signs to distinguish Fruitful Women.

CHAPTER XXIV.

Page.

WHITES 296

Definition of — Large Cities productive of — No Age free from it — Moist Climate promotive of — Womb, Centre of Morbid Action in Females — Whites sometimes Epidemic — Suppression of Whites.

CHAPTER XXV.

DISEASES OF THE WOMB, ESPECIALLY FALLING OF THE WOMB . . 310

Why Female Sexual Organs are more Subject to Disease than the Male — The Womb, the Centre of Impressions — First Variety of Prolapsus — Why rare in Virgins — Second Variety — Third Variety — Exciting and Predisposing Causes — Treatment — Concealment through False Modesty; Effect of — Presence of Foreign Bodies in Vagina.

CHAPTER XXVI.

DISEASES OF PREGNANCY 320

The Author's Aim — Cases of Supposed Pregnancy — Depraved Conception — Moles — Salivation — Capricious Appetite and Longing of Pregnant Women.

CHAPTER XXVII.

THE NERVES, AND NERVOUS DISEASES. 334

OPINIONS OF THE PRESS.

[From the *Eastern Argus*, Portland, Maine.]

"The Science of Life; or, Self-Preservation;" a medical treatise on nervous and physical debility, spermatorrhœa, impotency, and sterility, with practical observations on the treatment of the generative organs, with illustrations, by Albert H. Hayes, M.D., Doctor of Medicine, honorary member of the American Medical Society, Vice-President of the Columbia College of Physicians and Surgeons at Washington, D.C., &c. Published by the author, No. 4, Bulfinch Street, Boston. The character and object of this book is fully indicated by the title. Dr. Hayes has a high reputation, and the information which he gives in this volume, we presume, may be regarded as reliable as any physician may give. It is humane to relieve those who are paying the penalty of vicious courses, but far more to induce the young of both sexes to keep to the paths of virtue, health, and happiness. It seems to be the object of Dr. Hayes to accomplish both these objects, and in so far as he is successful in it, he will have the thanks of every friend of his race. JOHN M. ADAMS & Co., *Proprietors;* editorial, published Saturday, Aug. 22d.

[From the *Waterville Mail*, Waterville, Maine.]

The "Science of Life; or, Self-Preservation," Dr. Hayes's new book, which is advertised in our special column, is a valuable work for old and young, as it furnishes important information in a much neglected department. MESSRS. MAXHAM & WING, *Proprietors;* editorial, published Friday, Aug. 21.

[From the *Evening Standard*, New Bedford.]

The "Science of Life; or, Self-Preservation." Dr. Albert H. Hayes, of Boston, has published a volume of 280 pages with the above title, which is a medical treatise on nervous and physical debility, with practical observations on the treatment of disease of the generative organs. It is highly spoken of by the faculty. The *Medical and Surgical Journal*, than which there can be no higher authority, says, "this is a truly scientific and popular treatise, by one of the most learned and popular physicians of the day. If the young and middle-aged would avoid mental depression, all nervous disease, premature decay and death, let them read Dr. Hayes's new medical work, entitled 'The Science of Life.'" EDWARD ANTHONY & SONS, *Proprietors;* editorial, published Saturday evening, Aug. 22.

[From the *Calais Advertiser*, Calais, Maine.]

The "Science of Life; or, Self-Preservation;" a medical treatise on nervous and physical debility. This work contains valuable information in reference to the physical organization of man, and conveys to the minds of inquirers information that will enable them to avoid the terrible dangers to which the unwary are exposed. It should be read by every one, old and young, through the land. Published by JOHN JACKSON, Calais, Maine, Aug. 25.

[From the *Coos Republican*, Lancaster, N.H.]

The medical work advertised in another column by Dr. Hayes, and entitled the "Science of Life; or, Self-Preservation," has been received by us. It is a neat little volume, of undoubted value. Its possession will amply repay the outlay necessary to obtain it. It is the authoritative opinion of a qualified practitioner, and as such, will have a wide influence. Send for a copy. HENRY O. KENT, *Proprietor;* editorial, Aug. 25.

[From the *Daily Evening News*, Fall River.]

The "Science of Life; or, Self-Preservation;" a medical treatise by Albert H. Hayes, M.D., of Boston. Published by the author.

Dr. Hayes has had a very extensive experience as a medical practitioner and lecturer, and in this treatise he has condensed the results of his observations. The book is neatly printed, and contains several plates. ALMIR, MILNE, & Co.; editorial, published Saturday, Aug. 22.

PRELIMINARY REMARKS.

PRELIMINARY REMARKS.

The following work on the Sexual Physiology of Woman is to be regarded as a pendant of an earlier work from my pen, entitled "The Science of Life; or, Self-Preservation," — a medical treatise on Nervous and Physical Debility, Spermatorrhœa, Impotence, etc. That work, as its title indicates, was intended more particularly for males. Numerous editions of that work have been called for, not only in English, but in the French, German, Dutch, Italian, Spanish, and Portuguese languages. I am confident that the work in question contains everything essential to be popularly known to the male sex upon the management and preservation of the reproductive functions, and the cure of the infirmities to which they are subject, comprehending especially those which interfere with the efficient discharge of the mutual obligations of marriage.

Foreign translations of the Science of Life.

An unusually prolonged and varied experience in the treatment, by correspondence and otherwise, of functional disorders amongst persons placed in the most diversified circumstances, from the sultry skies of the torrid zone, to the frigid latitudes of the extreme north, has afforded opportunities for the collection of facts and observations, not accessible to others, and the publicity of which has been very beneficial. These were introduced into the body of the work ("Science of Life"); and

Author's experience.

no pains were spared in condensing, from every really trustworthy source, such facts and suggestions as were likely to prove useful.

Disappointments of matrimony.

Not the least important portions of the present work, as well as of my "Science of Life," relate to the objects, difficulties, and disappointments of matrimony. It is now well known in scientific circles, that while the objects for which marriage is contracted are as nearly universal and uniform as possible, its difficulties and disappointments are innumerable; but it ought to be equally well known, that nature and experience command the means of overcoming them, and that these means do not fail, unless in some extraordinary combination of unfavorable circumstances. The hopes and wishes of married persons, after being postponed and disappointed for years, have been repeatedly realized; and, in but few instances, has the desired result not been fulfilled, where attention has been paid to judicious instructions. For reasons which must occur to every intelligent man of the world, it is sometimes of extreme importance that matrimony should be blessed, in good time, with healthy offspring; and it is therefore desirable that the knowledge of the special fact above indicated should be diffused as extensively as possible. I

What the present work and its predecessor explain.

have explained fully, in both popular and scientific language, in the present work and its predecessor, first, the natural conditions and functions of the reproductive organs in both sexes, during the various stages of life, *when in health;* second, the unnatural or abnormal condition of these organs, their irregularities and infirmities, *when in disease*, and the causes thereof; third, the true principles of the treatment and cure of the functional diseases

of the reproductive organs, and of the restoration and preservation of the faculties mainly concerned in realizing the objects of wedlock. From this it is apparent, that works on generative complaints, which aim at completeness and exhaustive treatment of the subject, should contemplate the state of the whole frame,—in fact, of the entire physical and mental economy. As is shown, in both this and my former work, the reacting relations between mind and body never cease, and a prominent function of the healthful reproductive system is to maintain a well-poised equilibrium in both. Thus, practical instruction upon the management of special organs embraces measures conducing to the benefit of the general health.

Whilst I have been preparing the following work on the Physiology and Pathology of Woman for the press, into which the very latest additions to the stock of physiological knowledge have been incorporated from the highest authorities in both hemispheres, including new discoveries of my own, my attention has been drawn to the extent to which my first book has been unceremoniously "appropriated," or, in plain English, "pirated," by individuals who, without solid qualification, or regular medical education, undertake the treatment of an intricate and dangerous class of diseases. This has been carried so far as to create quite a perplexity in the minds of many, who, upon reading one of the disreputable publications alluded to, have found a large portion of its contents identical with the text of chapters written by myself.

Author's first work pirated.

Some misconception and inconvenience have been caused by this circumstance, and increase the necessity of drawing a still more marked and

decisive line of separation between this work and publications issued by certain unqualified parties who infest the purlieus of the profession.

The principal subjects treated in my two books having been, formerly, in consequence of a now declining prejudice, to a great extent neglected by the medical profession, those peculiar physicians, who, like myself, make a specialty of the thousand and one ills, moral and physical, which arise from the derangement of the reproductive organs, are doing an amount of good, and meeting with a degree of success and public appreciation, which are as flattering as they are deserved. Of course,

Jealousy of professional cliques.

I have encountered the malice and jealousy of particular cliques of professional men, whose unskilful attempts to deal with a certain class of complaints, so frequently send the subjects of their malpractice to me, as a last and sure resort for treatment and cure. But the malice spoken of, although it has been sufficiently active, has signally failed of its object, which was to lower me in the estimation of my professional friends and the public. It has done neither; because, it could neither deprive me of my qualifications, nor diminish the extent of my practice. Skill, and the *mens conscia recti*, and a constant tide of professional success, are powerful auxiliaries, sufficient to sustain their subject against any amount of professional jealousy and competition. He who cannot

"Climb against wrong and brighten into day,"

has no business to attempt to cope with the duties and responsibilities, and heart-burning rivalries

consequent upon the successful pursuit of an arduous profession.

Testimony to author's Science of Life.

A high authority has said of my "Science of Life," "that book has gone through many editions, and it has been translated into several languages, and the more it is inspected, I am satisfied, by medical men, the better convinced they will be, that it is written by a man of talent, accomplishment, and scientific knowledge. The author of this work is in the position of a highly educated medical man, writing upon subjects which ought to be made known — which ought to be investigated."

Such are the words of one whose name, if I were at liberty to make it public in this connection, would give them irresistible weight.

The present volume, with its predecessor, I venture to affirm, embraces the most complete and intelligible body of information ever published respecting the causes, prevention, treatment, and cure of generative infirmities. They combine the physiology and pathology both of the subject; and the present volume contains also what may be called the poetry and literature of the subject. For around the reproductive organs are grouped all those tender and softening emotions which make our mortal life almost an antepast of heaven; and the writer, who, in treating of the physiology and pathology of those organs, should neglect to discuss the cognate and collateral topics suggested would but half do his task.

Author's main object.

But my main object has been, to furnish sound and useful knowledge to every man and woman, to every youth and maiden, tending to enable them to enjoy the greatest of earthly blessings — vigorous health, prolonged to old age — to the

period of life at which the great law of nature proclaims that the allotted span of human existence draws to a close.

These privileges are naturally the inheritance of all men and women. Yet many are deprived of them; and the happiness of a full and vigorous use of the functions with which Providence endowed all are not by all enjoyed. Through a variety of causes, many are wholly excluded; while others either suffer from infirmities of which they are reluctant to complain, or from an apprehension (founded on circumstances perhaps known only to themselves) that similar afflictions may befall them.

It is intended to make the reader acquainted with facts which may assist in securing and prolonging vigorous health and attaining hale old age, averting causes tending to injurious consequences, and passing through life in the honorable discharge of its duties and the uninterrupted enjoyment of its legitimate pleasures.

The first object of prudence, is, to hold fast and preserve the jewel of health in all the functions of the organization; the second is, to *recover it when lost*. If prevention is better than cure, *cure has likewise its sacred and dignified mission*, and appeals still more touchingly to the emotions of sympathy and compassion. My object then, is, to *hold up a well-furnished hope of rescue and restoration to those who have forfeited or lost their priceless inheritance, and to indicate the means by which that hope can be realized.*

Prevention and cure.

Did the reader ever ask himself or herself the cause, or causes, of the fearfully increased and increasing number of divorces which are granted by our judicial tribunals from month to month, and

Alarming frequency of divorce.

year to year? The subject is a momentous one. Well may our social science congresses take this for one of the main topics of earnest discussion and remedial suggestion. Marriage is the very bond and cement of Christian society — monogamic marriage, in which a single man and woman become physically and spiritually one.

Not long ago, the Social Science Congress at Chicago attempted to deal with this subject of the frequency of divorce in American communities, but the learned pundits composing that congress found themselves much better able to state the ruinous social evils which result from the marriage-bond being lightly adopted and lightly shuffled off, than they were to offer a remedy for these evils. If common sense were invoked, the cause of such numerous matrimonial scandals, the mystery of so many unwilling celibates, the miseries of so many unhappy marriages amongst all classes and professions — would be explained. It would be perceived *and acknowledged*, that there is an insidious and malignant source of danger mixed up with our civilization; that it is frequently most rife in the very places where the expanding mind prepares to drink from the fountain-head of knowledge; and that to this danger, working on to its destructive results, an overwhelming proportion of the matrimonial disappointment and misery, which so widely and now so notoriously exist, is to be attributed. It would be known and acknowledged, that in the blooming season of boyhood and girlhood, and early youth, — at boarding-schools, or at college, or haply in some unsuspectedly corrupt companionship, — habits are contracted whose consequences a blighted existence mourns in vain.

An insidious source of danger.

Not in vain, however, if the sufferers were aware that resources of relief, rescue, and restoration to the privileges included in that comprehensive word, HEALTH, were at hand.

Not in vain, if they knew that the results of scientific labor and research had opened the portals of health, and brought the feasibility of recovery as near to certainty as any human expectation can be. The condition and causes of female sterility and infecundity, and the various disturbances of female health which interfere with the objects of matrimony, are topics deserving of careful consideration. Their origin is sometimes veiled in an obscurity which only tact, delicacy, and skill can disperse; but the painful fact is, that allowing for differences in constitution and conformation, it is, more frequently than is suspected, found to be identical with *the evil habit* which destroys the health of so many of the stronger sex. The remarks made upon this subject in the present volume, more particularly, bear equally upon the positions of the maiden, the wife, and the mother; and a careful perusal of them is recommended.

Female sterility, etc.

These subjects, so painfully interesting in themselves, so pregnant with momentous consequences, have occupied my thoughts, studies, and personal investigations, during a long series of years; and my professional practice is based on the result of observation, combined with experience. The conclusion to which irresistible evidence, repeated in thousands of instances, leads, is, that by far the larger portion of the sufferings and misfortunes indicated, are connected with a vitiating influence too often ignored by the medical profession, and as a consequence by sanitary reformers, moral reformers,

Writer's professional practice, what based on.

preachers, lecturers, preceptors, and custodians of youth. The sufferings of thousands are connected with *self-incurred but removable causes*. There are many whose recollections, carrying them back to the days of youth, find far more cause for regret than for satisfaction, because attended with painful memories.

Regretful recollection of youth.

In regard to the diseases and derangements of the reproductive organs in *both sexes*, it may be safely asserted that if the advice resorted to be that of a practitioner qualified by training, education, *and peculiar attention to this department of pathology*, little doubt need be entertained as to the result. It will be wise to bear in mind that *there is no cause for despair or even despondency*.

So far, in general, in regard to both my books. I will now speak more particularly of the present volume. My aim has been to write myself, and compile from the very highest and most costly authorities, on every branch of the subject treated, a physiologico-pathological work, which should convey the severe and often painful and repulsive truths of science in such language as would recommend those truths to the study of the most delicate and fastidious female reader. I have adopted the advice of one of the old Latin poets, to so mingle the bitter dose of scientific instruction with the honey of poetry and literature, as to make it palatable. Of course, I have freely laid under contribution the works of the great standard writers on physiology and the diseases and special hygiene of females. These works are, for the most part, cumbrous and voluminous; and the really important information lies buried, as it were, under mountains of, to the ordinary reader, irrelevant and unintelligible discussion. This information, these golden grains of knowledge,

An account of the present work.

I have diligently extricated and condensed, and presented them, so to speak, in a portable and comprehensible shape, so that he or she who runs may read. Of course, the leading principles of physiology have been so well enunciated by the masters of the science, that it would be vain to seek to give them in any more terse or expressive language than that employed by their original discoverers and enunciators, such as Cuvier, Darwin, Dunglison, and Carpenter. I have freely used the works of these great authorities, giving their statements generally in a condensed form, but retaining their identical words where it was possible.

To that great French writer on the diseases of females, Colombat de l'Isere, in the translation of Dr. Charles D. Meigs, the writer is under the greatest obligations in several chapters of his work, as all writers on the subject of the sexual physiology of women must be. Colombat is one of those authors who make any given scientific department to which they may devote themselves, as it were, their own private domain and property.

CHAPTER I.

INTRODUCTORY — WOMAN.

NEVER, at any period in the history of the world, was Woman such an object of interest and discussion, in speech and print, as at the present time. The press teems with works on woman, — works, sociological, physiological, and pathological. At length, there has arisen a great Woman's Rights Party, with its organs for influencing public opinion, and its array of public speakers and eloquent advocates, both feminine and masculine. But it is not the purpose of the author of this book to enter into the arena of discussion of woman's social or political rights and wrongs. He may entertain definite opinions on the subject, but his profession confines him to another department of the Woman Question. It is rather as an alleviator of the ten thousand ills of the flesh, to which Woman — far more than her companion, Man — is subject, than with the intent of ameliorating her social and political condition, that he has written the following chapters.

The woman's rights question.

The author's stand-point purely physiological and professional.

The writer's life has been devoted to the arduous practice of an arduous profession, rather than to the study of social or political science. In his own sphere, he feels competent, through a manifold experience and severe study, to do much, by way of practical suggestions and instructions, towards bettering the physical condition of woman; nor is this a little

thing. No social or political position is of any value to its subject, unless accompanied by bodily well-being. Good health is the first condition of an enjoyable existence, a *sine qua non*. This is a truism, an axiom, which only needs to be stated. The battle of life, for both sexes, is hard enough; but upon the sensitive and frail organization of woman has, upon the whole, been imposed the heaviest burden. It is through her pangs that we enter this breathing world; that we are projected, in the language of an old poet, weeping and naked, upon the shores of life. Well might the ancient Medea say, that she would rather confront an hundred armed men in battle, than endure the pains of parturition. As civilization advances; as the refinements and luxuries of life are multiplied, and brought more and more within the reach of all, — the human organization, especially in woman, becomes more delicate and sensitive, and more liable to functional derangement and disorder, through the predominance of the nervous over the muscular system. Delicacy of body has hitherto been the penalty of a high civilization, and we see not why it should not continue to be so.

Health, the first condition of enjoyment.

Peculiar hardships of woman.

Effect of luxury upon woman.

Whereas in our grandmothers' days, plainness of living and dress, and activity, both in the kitchen and the open air, were characteristic of the female sex, securing to them comparatively robust health, and an immunity from a multitude of diseases and sufferings, and an easy performance of the peculiar functions of their sex. Now, an all-prevailing luxury, and habits unfavorable to health, are the rule among all classes. High civilization, and sophisticated and artificial habits, such as now so generally prevail, are peculiarly dam-

aging to women; not only unfitting them physically, but rendering them averse to meeting the perils and fulfilling the duties of maternity.

Character of our current life.

Our current life is full of a feverish excitement. All is noise, tumult, change, and dissipation. The senses and mind are stimulated on all sides. There is no repose, quiet, and tranquil enjoyment of life. Contentment is a thing of the past. All are ambitious; are straining every nerve to seize the prizes of existence, such as wealth, office, and a luxurious style of living. Excessive and expensive dress is the very bane of the female sex. Everybody forgets that the real joys of life are few and easily attained. It is hardly to be doubted but that our forefathers, in their homespun raiment, the product of their own wives' looms, and with their homely but nutritious fare, were happier than their care-worn, luxurious, and dissatisfied descendants. They had domestic peace, household love, robust health themselves, and a healthy progeny. While, in our day, the quiet which is necessary to domestic enjoyment does not exist. Our population and habits are unsettled. We are like an army during a march; we do not reside in any fixed spot, we are only encamped. All this is hostile to the growth and well-being of the family; and, therefore, detrimental in the extreme to the health and well-being of woman, who has, by nature, strong local attachments. In fact, the delicate organizations of our American women have become proverbial, at home and abroad, and their inability, in but too many instances, to fulfil the functions of their sex. Their morbid condition, and almost universal ill health, have called into existence an army of em-

The present state of things unfavorable to the growth of the family.

piries, who enrich themselves out of their miseries and sufferings.

The writer's professional experience.

Object of the present work.

Sources from which it is drawn.

It has been the writer's painful professional experience to learn these facts; and hence his wish to disseminate through the medium of the printed page, — which reaches where he cannot personally, or, at least, a wider circle than he can personally, — the salutary knowledge which he has derived, not only from a most extensive professional experience, but from the highest medical authorities, both French, English, and American, whose volumes he has had occasion to study and consult, to meet the varying exigencies which are continually rising in the course of a large practice.

In medicine, he who is learned solely in the standard authorities, is but half armed for the warfare against disease. The physician's knowledge must be a union of his own experiences, and the experiences of others, as recorded in the books. Because woman is in a transition state, socially, at the present time; because her position is unfixed and uncertain, is she now, more than ever, liable to the maladies peculiar to her sex. Formerly, in the language of Longfellow, —

Woman's sphere.

> "The world of the affections was woman's world;
> Not that of man's ambition. In that stillness
> Which most becomes a woman, calm and holy,
> She used to sit by the fireside of the heart,
> Tending its flame."

Certainly, there can be no doubt, but that in the tranquillity of the domestic fireside, she can best and most safely perform and fulfil the duties of wife and mother.

We allude to the Woman Question, as it is called, not to express an opinion, but simply to point out the fact, that such a social agitation as is now going on, in relation to the true sphere of woman, as it is revolutionary, has a tendency to aggravate what are called the diseases of females, and to increase the tendency to these diseases. It is among the contented, unambitious, and primitive peasant populations of Europe, that the original injunction to increase and multiply is most faithfully and easily obeyed. It is along the cool, sequestered vale of life, that health and happiness are oftenest found. Even out-of-doors field-labor, with all kinds of exposure to the elements, is found less detrimental to the health of females than an in-door life of comparative idleness, spent in lolling upon sofas and stuffed rocking-chairs.

We have no peasantry.

We have no kind of native-born population, answering to the European peasantry, to recruit from; but we can, and do, import such a population. The question is, Cannot our women, by a proper diet, by proper exercise, and a knowledge of their own organizations and of the laws of health, recover the vigor and longevity of their grandmothers?

The author does not feel called upon to make any apology for writing thoroughly and minutely upon the subject of sexual physiology for the public at large, and for the ladies in particular. The days of an ignorant prudery are past, or ought to be. It is the day of light and knowledge. Ignorance is a kind of bliss which can no longer be enjoyed in the broad daylight of the nineteenth century. The physiology of the reproductive organs ought to be taught to all. The passions which have those

It is the day of intelligence.

organs for their seat and instruments are the most devastating, if not properly controlled, which tyrannize over human nature.

The social vice.

The social vice was the dry-rot of the Pagan civilizations of antiquity. It corrupts human nature at its very roots. It is the source of diseases more fell and loathsome than any other. Its victims are oftenest the young; it strikes those in the morning of life. In fact, the social vice is the canker at the core of all high and luxurious civilizations like our own. The writer's experience, the hundreds and thousands of sad cases of the abuse of the organs of reproduction, in both sexes, for which he has been called upon to prescribe professionally, have led him to see the necessity of a wider diffusion of a knowledge of the principles of sexual physiology, so that young men and young women may be properly warned and instructed, ere they are hopelessly ruined and blighted. Love, and the sexual passion, legitimately enjoyed, are the sources of the chiefest joys and consolations of life, as well as the appointed means of the multiplication and continuance of human beings upon this planet. As the right use of the organs of generation is productive of new life, and the greatest earthly felicity, so their abuse is radically ruinous and blasting to society and the individual.

Necessity of a better knowledge of sexual physiology.

The author of this work, if he could disclose the secrets of his consulting-room, could a tale unfold, which would show the indispensable importance of a generally-diffused knowledge of the principles of sexual physiology.

The author's former work.

In a work not long ago published, which has already had a most wide circulation, entitled, "The Science of Life; or, Self-Preservation," a treatise on

nervous and physical debility, spermatorrhœa, impotence, etc., the author addressed the male sex more particularly. The present work is devoted to the physiology of woman, and her diseases, exclusively. It was only by stealing an hour, now and then, from professional engagements, that the author was enabled to write his first medical treatise. It was a labor of love, performed sometimes at the expense of sorely needed sleep and rest. But he does not grudge the labor and privation which were necessary to its composition. The book has gone where he could not go. It has had thousands of readers, and made its writer the subject of confidences, both oral and epistolary, which have given him a new insight into human nature, and enabled him to do immense good in the line of his profession. In the language of Michelet, giving an account of the results which followed the publication of his *L'Amour*, "The world came to me. From it, I obtained much information. Secrets of our nature, to which I should never have penetrated, were revealed to me in an instant."

Michelet's experience.

Within the last quarter of a century, the physiology of the female reproductive organs may be said to have been revolutionized by the addition of two new branches, — embryogony and ovology, — which have given altogether a new aspect to the science of woman, if I may be allowed the phrase.

The leading treatises upon the diseases and hygiene of females are expensive, and designed for professional readers only. But they contain stores of knowledge of vital importance to all women, whether married or unmarried. It is high time that this knowledge were popularized, and placed within the reach of the entire female sex of the United States,

so that, in all the junctures and crises of life, they may have the knowledge that will make them equal to the emergency. If debility and ill-health are the rule among our women, the married portion of them, it is high time, both for their own welfare and for the welfare of their offspring, that a knowledge of the special hygiene of their sex should be made accessible. It has been the aim of the writer to render such knowledge accessible to all in the following pages.

The writer's aim.

The purity of a stream depends upon the purity of its source. No country can have a vigorous and energetic population, to carry it forward in the march of civilization, and keep abreast of the foremost nations, unless its women can bear stalwart and healthy men.

Spartan mothers gave birth to a race of heroes, because they were themselves paragons of health and personal beauty. Indeed, there can be no beauty without health. Beauty is, as it were, the aroma and blossom of health. To be sure, there may be an evanescent loveliness lasting during girlhood, but it quickly fades, and never ripens into the mature, autumnal charms of the healthy matron. This evanescent beauty is too characteristic of our American females. "Who is the greatest woman of your knowledge, sire?" inquired Madame De Stael, of the first Emperor Napoleon, expecting a flattering reply. "She who has borne most children," bluntly answered the emperor.

The greatest woman.

Childlessness was a reproach among the chief nations of antiquity. It is far otherwise in this age and in this latitude. Says a recent popular writer: "Nothing can save our Protestant population but the intermarriage of the German and Irish

Catholics." In the days of ancient Paganism, the reproductive organs were objects of worship, and religious symbols borne in processions. Surely, the study of their physiology should not be omitted from any motives of prudery or morbid delicacy.

The study of physiology.

From the passion of love spring all the arts and refinements of civilization. As the mother is, so the child is.

I will close this chapter by quotations from two eminent French writers, the one literary and the other professional. "The object of love, woman," says Michelet, "is a being who stands quite alone, and is much more unlike man than would at first appear; even more than differing from, opposed to him, but pleasingly opposed, in a playful and harmonic contest, which constitutes the great charm of this world. In herself alone, she presents to us another opposition, a struggle of contrary qualities. Elevated by her natural poetry, her quick intuition, and divining faculty, she is the not less held down by nature in the bonds of weakness and suffering. Every month, she wings her upward flight, our poor, dear Sybil, and, every month, nature admonishes her by pain; and, by a painful crisis, returns her to the hands of love." — "Feeble and sensitive by birth," says Colambert, "and destined by nature to give us existence, and by means of her tender and watchful care, to preserve us afterwards, woman, the most faithful companion of man, may be regarded as the very complement of the benefits bestowed upon us by the Divine Being; as an object fitted to excite our highest interest, and as presenting to the philosopher, as well as the physician, a vast field for contemplation."

Woman's destiny.

CHAPTER II.

THE MYSTERY OF LIFE.

And the Lord formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul.

Hast thou not poured me out as milk, and curdled me as cheese?
BIBLE.

Let us linger for a moment upon the threshold of our subject, before entering into its details. The oldest, or one of the oldest pieces of writing extant, is called, emphatically, the Book of Genesis, or generation, because it professes to give an account of the advent of man on this planet, his creation in the persons of Adam and Eve, and the procreation of the human species from the primitive, unborn pair, who came not from the womb, but were directly moulded by the hand of God, and out of the red earth. It was a question that used to be mooted among the schoolmen, whether Adam had a navel, or not. This was a discussion, more curious than wise or profitable. Modern science has discarded the Mosaic or Pentateuchal doctrine of the unity of the human species, so far as its origin is concerned; and denies that it can be traced up to a single pair of parents. Indeed, it is boldly affirmed, that Man was a tenant of the globe for unnumbered generations before the Mosaic Adam, who is to be regarded rather as the ancestor of the civilized or civilizable

Whether Adam and Eve had a navel.

The Unitary doctrine of the origin of Man discarded by Science.

races. In Adam, then, the general parent of humankind, the race — which had previously been without history, and dwelt in caves, like wild animals — emerged into a progressive, conscious subject, and historic being.

The vital force, an enigma.

The origin of life is the great riddle and enigma of Physiology; and to its solution, the greatest modern physicists, such as Cuvier, Agassiz, Oken, Owen, Huxley, and Geoffry St. Hilaire, have bent and are bending all their energies and ingenuity. But this wonderful force, the vital energy, differs from all other forces. The organs which are its seat and instruments can be dissected and investigated, but no trace of the subtle, elusive power which operated them can be found. When its hiding-place is laid open, the life has departed, has gone, "leaving doors and windows wide." Says a great physiologist, of the Swedenborgian school (Wilkinson), "life is the dim personality of the human body, as well as the atmosphere in which it moves and breathes."

Quotation from Wilkinson.

Upon this lowest floor of our existence, there rises an edifice of many stories; upon simple life, which is the vegetable in the animal, there is founded a life of life, which is mind. The mind is many-chambered and many-storied. Life dwells in the body, but the mind, or superior life, inhabits the head, or, according to anatomy, the brain. The brain, then, is presumably the body of the mind; and whatever is wisdom or faculty in the mind, is furniture or machinery answering to faculty in the brain.

The greatest mystery.

Cuvier says, the birth of organized beings is the greatest mystery of the organic economy and of all nature. We see them in the process of development, but not of formation. *Omne vivum ex evo*, is an old

Latin aphorism of the physiologists; that is, everything quick, or living, issues from an egg. An old Attic poet sings of the great, original, mundane egg, from which Love itself was born, —

> "Glittering his back with golden plumes,
> And fleet as eddying air."

This mysterious vital force, or life-power, has been called by various names by various biologists; but mere names do not explain anything. Life, like all other forms of force, manifests itself in sensible phenomena; but itself eludes the senses. Given, certain kinds of organizations; and there is life. It is an occult force, fed by supplies from the outer world, which supplies of sustenance it transmutes and builds into the living body, of which it is the motive power. Whether we call it the cosmic, plastic, vegetative, or vital force, it is all the same. It is a mystery, an insoluble enigma; and of its nature and essence, we can know absolutely nothing. It throbs in the heart and the red rivers of the blood; it respires in those fleshly balloons tethered in the chest, to wit, the lungs; and it acts as a subtle and all-dissolving and transmuting chemistry in the assimilative organs; and it imparts itself, without diminishing itself, through the reproductive organs to other organizations, similiar to that which it inhabits. When we come to the origin of life, we come to a dead-wall, as it were, to an impenetrable mystery. We observe and study the phenomena of generation; but into the vivifying principle, *the vivida vis*, we can never reach. In physiology and pathology, as well as in every other branch of human inquiry, causes are hid; phenomena, effects, are alone manifested. If we ask what is the

Life, an occult force.

cause of the extrusion of the quick fœtus from the womb, at the expiration of two hundred and eighty days, we receive no satisfactory answer to our query, except that such is ordinarily the fact.

What is the cause and office of the catamenial discharge? The most profound physiologist can only conjecture and frame hypotheses. At the end of fourteen days after conception, all that can be found in the womb of the future mother, is simply a little ovum, fertilized and fecundated by the sperm, or semen, emitted from the male reproductive organ. The female is unconscious, for a time, of its existence in her uterus. But, day by day, this small germinal dot shows a wonderful power of development and evolution. The cloud, no bigger than a man's hand, that gradually unfolds into an all-devastating tempest, is not so wonderful as this thing, which is at first no bigger than a pea. At the end of twenty-one days, there is something shaped like an ant, or a grain of lettuce, or a grain of barley. It is but a tenth of an inch in length, and gives no token of what it is to become.

The germinal dot.

A distinguished American zoologist, writing on the origin of life, and the development of animals, says:—There is one fact that must not be forgotten; it is this, that all animals, from the monad, the gumdrop, amœba, up to man, at one time, cannot possibly be distinguished from one another. I mean, in the earliest egg-state. All eggs commence as a mere drop of fluid, with certain bipolar characteristics. Now, whether this drop of fluid be taken from the amœba, the coral, the worm, the shell-fish, or the rabbit, you could not tell the one from the other, any more readily than you could distinguish a drop of water from Cochituate Lake from that of

The earliest egg-state.

Mystic River. The distinguishable characteristics appear in the process of time and development. Now, when I say that all animals, from the monad up to man, at one time, cannot possibly be distinguished, *per se*, from one another, I mean to draw the attention to another fact, which is, that all animals, at one time, are as simple as those which are thus far known to arise by spontaneous generation. The higher animals do not at once leap into life in a full-grown state, but they arise out of as simple elements as do those lowest forms which originate through spontaneous generation. The higher forms pass through the same relative conditions as do the lower ones, and then rise to higher states. This idea is also carried out in another way, in restricted groups. Thus, the quadruped, when in its earliest stages, possesses a conformation of its principal organs, — that is, the heart and nervous system, — similar to that of a fish; then it takes on the form and relations of the next higher group, namely, the reptiles; then, that of birds; and, finally, its adult conformation.

Parentless animals.

In the instance of spontaneous generation, the animals commence their simple stages without a parent; whereas among higher animals, their simple drop-of-fluid stage is farther removed from external causes, and is subjected to parental influence as a primary cause, and secondary causes affect the progeny through the parent first, and afterwards, directly when the egg-animal is cast forth upon the world.* It is true, indeed, as the learned

---

* Mind in Nature; or, The Origin of Life, and the Mode of Development of Animals. By Henry James Clark, A.B., B.S., etc. New York: Appleton & Co.

zoologist above quoted affirms, that man, at his point of departure of embodiment, is a mere gum-drop in appearance, a gelatinous dot. It is out of such a little consistence that man's imperial shape and woman's Ionic form are gradually evolved. A drop of gum is the starting-point. In like manner, the majestic oak starts from the acorn; and the Mississippi, the Rhine, the Ganges, and the other great rivers of the earth, if traced to their sources, will be found welling and trickling from some cloudy spring far up in the highlands. Life has been variously defined as a state of force, etc. When once the clock of an organic being is wound up, and set agoing, it stops not until it is ready to be resolved into its constituent elements.

Man at first a mere gum-drop.

Generation is of two kinds, regular and spontaneous. Regular generation is that by which like propagates like, or the different species of animals reproduce themselves through sexual coition, conception, gestation, delivery, and lactation. Spontaneous generation is that by which living beings are evolved, either from organized beings, dissimilar to themselves, or from the mere combination of inorganic elements. The old theory was, that each species of living, organized beings was the unknown element of a distinct act of creation, and, that the creative process had ceased with the six days' work recorded in Genesis; that is, that God, once on a time, wound up his work, set it agoing, and left it to itself, except, occasionally, when he sees fit specially to interpose. But modern geology and physiology have both shown that this theory has not a leg to stand upon.

Two kinds of generation.

Spontaneous kind.

The present animal and vegetable kingdoms with which we are acquainted, were both preceded by by earlier and extinct fauna and flora, of a cruder, vaster, and altogether different conformation, which are found fossilized in the great stone book, as it has been called, of the earth's interior. Life began, and begins, in low and simple forms, and works its way up from these to more complex, and ever more complex, organizations, until it reaches the human form, which is the crown and apex of creation, or material organizations. I will quote again from Professor Clark, on the subject of spontaneous generation. He says, in the work already mentioned, "When geologists first announced that the earth contained the remains of animals and plants, which, from the nature of the action of physical causes, and the position in which these fossils were found, demonstrated that they belonged to a period, or series of periods, anterior to the creation of man, the assertion was received, by what was called the 'Church Party' in England, with an expression of horror, that scientific men should attempt to support a theism by the palpable evidence of scientific facts.

The beginning of life.

"Without stopping at the present time to show how this holy horror was, finally, and in process of time, changed to an enthusiastic and religious advocacy of this geological theory, I will merely state the fact, and then pass on to the result of this general recognition and admission of the existence of a Preadamite world. Having made this admission, it became evident, at the same time, that a series of creations had been going on previously to the origination of the present race of beings on the

A Preadamite world.

globe; and, out of the contemplation of this idea, arose the question as to whether the Creator has not continued to exercise the creative faculty *at all times*, even to the *present day*. They recognize the Creator's controlling hand when they see the child resembling the parent; it is not blind chance to them, that like come from like; there must be some reason for this; and the reason they give, is, that the Creator is continually active in the administration of his laws. If, therefore, he is visibly present in the operation of one series of acts, it may be that he *still continues* to carry on another series, which we know he has at some time, in the remote past, begun. At some unknown distant period, animals originated, through creative influence, on this globe. Now, then, the question arose in this form, namely: Did all animals, which have appeared from the beginning, originate by *birth* from the first created; or, is birth only one mode of continuing their presence on the earth; and, has the Creator also *constantly repeated* his original creation through all time, even *until now?* This question arose from various reasons, and among others, because observers had noticed the fact, that, when a pond, or stream, or a whole tract of country, dries up, as oftentimes happens in the summer months, as a natural consequence, all the animals and plants in it, which are dependent upon water for existence, die for want of their natural element; but when the rains of autumn have refilled these streams and ponds, the aquatic animals appear again. This, some observers accounted for, by supposing that the eggs and seeds of these animals and plants were constantly floating in the air, and were washed down by the rains, and thus the pond became re-

God still continues to create species.

The conditions of creative, still present.

An instance in point.

stocked with life. But other observers disputed the fact, that there were seeds and eggs floating about in the air; or insisted that they were in such small numbers, that they could not possibly account for the sudden appearance of such large quantities of living creatures in these ponds; and, therefore, propounded the idea that they originated then, exactly in the same way as did the first aquatic animals that originally began life in the ponds and rivers of this globe."

To show that spontaneous generation is possible, in other words, that the work of creation is still going on, a flask is filled with a boiled solution of beef-juice, mutton-juice, sugar-water, ammonia, gelatine, etc. The flask thus filled is hermetically sealed, and supplied with pure air at the ordinary temperature, and submerged, during the experiment, in boiling water. The flask is corked, and a glass tube passed through the cork. The glass tube is bent at a right angle, and an iron tube inserted, and cemented with plaster of Paris. The iron tube is filled with wires, leaving only very narrow passage-ways between them. The solution in the flask is boiled, and the iron tube filled with the wires, heated to redness. While the contents are boiling, the steam expels the air from the flask. When the boiling has continued long enough, the heat is withdrawn from beneath the flask, and, as the steam condenses, the air again enters through the iron tube, the red heat of which is kept up, so that all organisms contained in the air, whether eggs or seeds, are burnt up and destroyed. The flask is cooled very slowly, in order that the entering air may be as long as possible in passing through the iron tube; and thus the destruction of its

organic matters insured. When cold, the flask is sealed with the blow-pipe. Here, then, you have lifeless, inorganic matter. The flask is hung up in a temperature of seventy or eighty degrees Fahrenheit, and on the fourth day, a *film* forms. The flask is opened on the eleventh day, and there is a distinct rush of air outwards. Large numbers of living beings, of a low organization, called bacteriums and vibrios, are found moving with great rapidity. Here, then, we have the production of life spontaneously, without any antecedent in the shape of parent, egg, or seed. That is; given, certain conditions of matter; and the Creator intervenes visibly now, as in the beginning.

Commenting on the above experiment and its results, Professor Clark says: — "Under these circumstances, the advocates of the continued creation of animals to the present day, claim, that if living creatures do appear in the isolated pool in the flask, they must have originated there without the previous intervention of a parental form, because all life had previously been extinguished by the heat. From this, then, they argue, that when the dried-up pools and streams are refilled by the autumn rains, the animals which appear therein *originate on the spot*, in the same way as did the first animals that peopled this world."

Animals appear without parents.

We are brought, in fact, by the above experiment into the very presence of creative power. With God, time is all in the present tense. He is forever creating the world; —

> "Ever fresh the broad creation,
> A divine improvisation,
> From the heart of God proceeds."

The Creator is not a God of the dead, but of the living. He is ever present behind the cloud of material phenomena, agitating, enlivening, and directing the sum-total of material things. To assert this, is not to assert the truth of Pantheism; but it is simply to affirm a fact, which science now recognizes, — God creates in every mother's womb, man in his own image, as much now as he did out of the red earth in the Garden of Eden. He breathes into the nostrils of every fœtus which is ready to be extruded into the external world, the breath of life; and thus it becomes a living soul.

CHAPTER III.

MARRIAGE—ITS PHILOSOPHY AND HYGIENE.

Man was made of social earth,
Child and brother from his birth;
Tethered by a liquid cord
Of blood, through veins of kindred poured.
Next his heart, the fireside-band
Of mother, father, sister, stand;
These, like strong amulets preferred,
Throbs of a wild religion stirred!
Virtue to love, to hate them vice;
Till dangerous Beauty came at last—
Till Beauty came to sweep all ties;
The Maid, abolishing the past,
With lotus wine obliterates
Dear memory's stone-in-carved traits,
And by herself supplants alone
Friends, year by year more wily known.
When her calm eyes opened bright,
All were foreign in her light.
It was ever the self-same tale,
The first experience will not fail.
Only two in the garden walked,
And with snake and seraph talked. — EMERSON.

The golden gate of sleep unbar,
  Where Strength and Beauty met together,
Kindle their image like a star
  In a sea of glassy weather. — SHELLEY.

Principle of sex runs through all nature.

A little book has recently appeared in England, in which it is shown that the principle of sex runs through entire nature. The physical organization of the male of the human species shows that he

is of himself imperfect, without his sexual counterpart, woman, who may be called his complement, or fulfilment. Man and woman, united in wedlock, make a perfect, complete being. Each presupposes and needs the other. Each brings to the other what he or she lacked, both physically and mentally; both corporeally and spiritually.

Every human being has an affinity.

As there are chemical affinities, so it is alleged that there is for every human being another, who may be called his or her affinity. Sometimes these affinities meet, and they spring to each other with an irresistible impulse. They are at once fused and

Man and Woman, two halves of a perfect whole.

melted into one. They recognize in each other the two halves of a perfect whole. In their union, they find complete satisfaction, and a tranquil, unspeakable delight. But more often, the twin halves do not meet at all, or meet too late. They do not find each other in the confused *melee* of life, but wander at random, secretly conscious, by a vague yearning, of each other's existence, but unable to find each other. They finally seek for consolation by mating, as best they can, and are unhappy.

We have said that the principle of sex runs through all nature. The Sun is called a bridegroom in the Scriptures. He is the great engendering life-fountain of our planetary system. On the contrary, the Moon is receptive and feminine, reflecting the borrowed lustre of the Sun. Shelley calls her

"A most enamored maiden."

The Sea is the fecund mother of life — the "green-girdled mother," as a living poet calls her. The Earth herself, in the old Pagan religions of

the northern and southern nations, was denominated the mother. She was the all-fruitful, the foodful mother. In spring-time, Jove, or the sky-god, descended into her lap in fertilizing showers, and made her fruitful, impregnating her, as it were.

Our social reformers, at the present time, are endeavoring to qualify woman to lead a life of celibacy, and to make her the rival, rather than the companion and complement, of man. All distinctions of occupation are to be broken down, and the two sexes are to be competitors in the camp, the court, the school, in the pulpit, at the bar, on the battle-field, on the stump, in the caucus, in the halls of legislation, and in short, in every field of human activity. One would suppose that nature had sufficiently discriminated the two sexes, and indicated the true sphere of each. But I will not proceed farther in this direction, only to say, that some of our new social theories bode no good to the civil institution, or sacrament of marriage, as the Roman-Catholic theologians insist on calling it. Marriage is the foundation of the family; and the family is the foundation of the state and of society.

Marriage, the foundation of the family and the state.

The first chapter of Michelet's book, entitled "Woman" (La Femme), is headed with the caption, "Why people do not marry." Of course, his remarks are based on the social phenomena of France. He says we all perceive the capital fact of our time. From a singular combination of circumstances, — social, religious, and economical, — man lives apart from woman. Elsewhere, he says, "We cannot conceal from ourselves, that, in these latter times, the inclinations have undergone profound changes.

Why people do not marry.

The causes of this are numerous. I will state two only, mental and physical, at the same time, which, going straight to the brain and deadening it, tend to paralyze all our moral faculties. For a century past, the increasing invasion of spirituous liquors and narcotics has been marching irresistibly, with results varying according to the population; here, obscuring the mind, hopelessly depraving it; there, penetrating deeper into the physical economy, reaching even the race itself; but everywhere isolating man, giving him, even in his home, a deplorable preference for solitary enjoyment. No need to him of society, of love, of family; in their stead, the dreary pleasures of polygamic life, which, imposing no responsibility upon the man, not even protecting the woman (as the polygamy of the East does), is, therefore, more destructive, indefinite, limitless, stimulating and enervating continually."

A dreary polygamy.

Whatever diversions a man may find, he is unfortunate in having no fireside — in not possessing a wife who is truly his own. A wifeless existence for man is a sombre, cruel, and bitter one; in fact, there is no genuine life for man, without woman, and none for woman, without man. Marriage is the imperious demand of nature; that is, monogamic marriage, or the lasting union of one of each sex. Races of men are powerful in mind and body, exactly in the ratio of their monogamic life. In natural history, the superior animals tend towards the married state, and attain it, at least, for a time. And it is from this fact, in a great measure, that they are superior. Fortunate is he who rescues a woman, who frees her from the physical fatalism in which she is held by nature; from the weakness imposed upon her by seclusion. Happy, he who

No genuine life for man without woman; and *vice versa*.

Monogamic life most favorable to races.

instructs her, elevates her, strengthens her, and makes her his own. A wife will rescue her husband from the servitude of his base passions. If his home is a happy one, he will not go under the smoky lamps of a ball-garden in quest of love, nor to the street for intoxication. He, who is strong, and does a man's work; he, who is going out to his daily toil, leaves at home a beloved creature, who loves and thinks of him alone, — is, by that very fact, inspired with cheerfulness, and he is happy all the day. Receive for a truth, this exact mathematical maxim: — *Two persons spend less than one.* I see many bachelors who remain such, from sheer fright at the expensiveness of matrimony, and yet spend infinitely more than a married man, after all. They live very dearly, at the restaurants and saloons, and at the theatres. To relieve the tedium of a cheerless, solitary existence, they indulge in various expensive habits. They smoke, in order to forget. We should never forget. Woe to him who forgets evils, for he never seeks their antidotes! The man, the citizen, who forgets, ruins, not only himself, but his country. A blessed thing is it, to have by your hearth-stone a reliable and loving woman, to whom you can open your heart; with whom you can suffer. She will prevent you from either dreaming or forgetting. We must all suffer, love, and think. In that is the true life of man.

Two persons spend less than one.

Some men call themselves bachelors. But are they really so? I have long sought, but I have not yet found, that mythical being. I have discovered that everybody is married. Some by temporary marriages only, it is true, — secret and shameful, these, — lasting, sometimes for months, sometimes

There are no bachelors.

369783

for a week, and often only for an hour. These marriages of hourly duration, which are the utter degradation of the woman, are not effected at a less cost to the man. When the marriage is judicious, entered into with forethought; when the family does not increase too rapidly,—the wife, far from being a hindrance to liberty of action, is, on the contrary, its natural and essential element.

A good wife and good trade.

Young man, if you have a good wife, and a good trade, you are free; you can migrate to new scenes of activity, or remain at home. The young wife soon overtakes her husband, even if he is several years her elder in age and experience of life. She passes him very soon: maternity, the wisdom of economy, augmenting her importance, she counts for as much as he does; and she is loved like a sister. But, when work has worn the man down, the sober and serious wife, the good genius of the house, is loved by him as a mother. She cares for him; provides for him; he reposes upon her, and even allows himself to be like a child to her; feeling that he possesses in her a good nurse and a visible providence.

When, on Saturday night, the man brings home his week's salary, and she puts aside the necessary portion to feed and clothe the children, she leaves for the husband enough for his little indulgences; and she forgets no one but herself. In this country, with its inexhaustible area of virgin soil, waiting impatiently, as it were, for cultivators, and brought under the dominion of civilized man, every young couple can, in a few years, rear for themselves a homestead; can acquire a little territory of their own, which they can improve and adorn, from year to year, and make a true domestic paradise for

A true domestic paradise.

themselves and their children. They can derive a subsistence from their own acres, and never know what it is to have the wolf at the door, or to be dependent upon the whims and caprices of employers, capitalists, bosses, and landlords. A homestead should be the first thing aimed at by a young American couple, where they can be true sovereigns, and stand erect in their own borders, looking the whole world in the face.

Let us consider marriage first, philosophically, and then hygienically. It is a relation having the sanction of all laws, both human and divine. In two of the great Christian sects, it is regarded as a sacrament. "It is Hymen," says Shakespeare, "that peoples every town." Celibacy was regarded almost as a crime in some of the ancient states; while the father of a numerous family had special privileges and was specially honored. Length of days, superior health and happiness, more often fall to the lot of the married than to the single. Especially is a lonely life dreadful for woman. Her whole nature is liable to run to waste; the very ends and aims of her existence and sexual organization being unsatisfied and utterly defeated.

Celibacy, a crime.

In old countries, like England, for instance, it is well known that the female sex is in excess; and that, therefore, hosts of women are forced to lead an anxious and aimless life of celibacy; their affections and instincts running to waste, like water spilled upon the desert.

An anxious and aimless life.

A recent writer on the subject of modern woman, maintains that women ought to make the advances in courtship. Marriage being of the last importance to them, why should they not take the initiative, and even "pop the question," as it is called. In

Woman ought to make the advances.

past times, the male has been usually the wooer. The attitude of the maiden sued to, has been that of coyness and reserve. The maid has been passive, and the youth active; her very coyness inflaming and stimulating his ardor. My own opinion is, that, even in these days of masculinizing the fair sex, the male should be the suitor. In other ages, and among various nations, the modes of wooing and courtship have been various, not to say in some cases singular. We read that in ancient Sparta, all the damsels used to be shut up in a dark room, while a number of unmarried young men were shut up with them, and whichever girl each of the young men caught hold of, he led away as his wife, without a dowry. Beauty is to woman, according to an ancient poet, what his claws are to the lion, and his wings and beak to the eagle, and his swiftness to the deer. Certainly, a beautiful woman is always easily disposed of in the matrimonial market. Acting on this fact, one ancient city used to have a sort of annual auction of its marriageable maidens.

Modes of courtship.

Value of beauty to woman.

A Babylonian custom.

The wealthy Coelebs, in search of a wife, of course, bid in the fairest, paying any price for beauty. The money derived from the sale of the loveliest virgin was used as a dowry for the homely ones, who fell to the lot of the poorer classes. In this way, all the nubile virgins of the city, both handsome and homely, were annually disposed of. In the choice of a wife, comeliness of person and good health are qualities not by any means to be overlooked. Indeed, they are all-important when combined with proper moral attributes. After all protests against limiting the sphere of the sex to a single function, public opinion still regards woman, primarily, in her relation to the generation to come. Fortunately,

Comeliness and good health.

different men admire different styles of beauty and complexion, so that all styles of women can find a market.

Men small of stature generally admire large and even overgrown women; and big men affect small women. The two most charming complexions, the brunette, which is the hue of the South, and the blonde, which is the hue of the North, are the extremes of a long scale of complexional lights and shades and temperaments. A wife who is merely ornamental is but a poor possession for her husband. She should be useful and ornamental both, fitted to shine both in the parlor and the kitchen.

A knowledge of physiology.

I maintain, that a knowledge of the physiology of the reproductive organs is necessary for the young of both sexes. Persons about to marry should know each other as intimately as possible consistent with with propriety, so that no unpleasant development and discovery after marriage may take place to mar the union, and make one of the parties to it feel that he or she has been the victim of concealment and false pretences. The poet says: —

> "As the husband is, the wife is;
> Thou art mated with a clown,
> And the grossness of his nature
> Shall have weight to drag thee down."

The happiness of the unborn involved in every marriage.

The happiness of unborn human beings is involved in every marriage; and, therefore, the parties to the union should know each other. The mere heat of youthful blood, and the desire for sensual gratification, make young lovers too blind and precipitate oftentimes; and so, after the ardors of the honeymoon have been cooled down, they may find themselves the subjects of life-long mutual dislike and

repugnance; when, if discretion had been consulted, instead of passion and appetite, the ill-assorted match would never have been consummated. A healthy man and woman both naturally crave the enjoyments of the marriage-bed. The appetite is an impulse of nature, and its proper gratification is healthful. But marriage should be based on something besides mere lust. There should be pure love, as well as physical ardor. The wife should not be the mere passive instrument of animal enjoyment to her husband. The conjugal embrace should never be indulged in against her wishes. The husband may have the power, but he is a brute, if he imposes upon his wife the pains of labor and the perils of maternity against her consent. She is a free, moral agent, as well as himself. Where the act is not mutually pleasurable, where the woman is enforced to yield to her husband's lust, coition then becomes purely animal on the part of the husband, and he might as well gratify himself upon a stuffed figure.

Proper gratification healthful.

The wife, a free, moral agent.

Enforced embraces; their fruit.

The children born of such enforced embraces are, in the language of Michelet, an outrage on their mothers. The great physiologist, Carpenter, says: "In proportion as the human being makes the temporary gratification of the mere sexual appetite his great object, and overlooks the happiness arising from spiritual communion, which is not only purer, but more permanent, and of which a renewal may be anticipated in another world, does he degrade himself to the level of the brutes that perish. Of course, no man who cannot become a father, and no woman who cannot become a mother, can be truly married. The ceremony of union may take place, but congenital impotence renders marriage void *ab initio*, or voidable."

Congenital impotence voids marriage.

Milton, in his "Paradise Lost," gives a charming description of the wedded life of the two first lovers, Adam and Eve, during their stay in the sinless garden. Adam, he describes as physically the perfection of manhood; and Eve, as the perfection of womanhood. The whole passage, descriptive of the first pair of lovers, and their nuptial bliss in the paradisal garden, ought to find a place in every essay on wedded life.

Quotation from Milton.

"For contemplation he and valor formed,
For softness she and sweet attractive grace;
He for God only; she for God in him;
His fair large front and eye sublime declared
Absolute rule; and hyacinthine locks
Round his parted forelock manly hung
Clustering; but not beneath his shoulders broad:
She, as a veil, down to the slender waist,
Her unadorned, golden tresses wore,
Dishevell'd, but in wanton ringlets waved;
As the vine curls her tendrils, which implied
Subjection; but required with gentle sway,
And by her yielded, by him received.
Yielded with coy submission, modest pride,
And sweet reluctant amorous delay."

. . . . . .

"So hand in hand they passed, the loveliest pair
That ever since in love's embraces met;
Adam the goodliest man of men since born
His sons, the fairest of her daughters Eve."

. . . . . .

"So spake our general mother, and with eye
Of conjugal attraction unreproved
And meek surrender, half-embracing leaned
On our first father; half her swelling breast
Naked met his, under the flowing gold
Of her loose tresses hid: he in delight
Both of her beauty and submissive charms
Smiled with superior love, and pressed her matron lip
With kisses pure."

. . . . . .

The offspring of such mutually ardent intercourse will be sure to grow up beautiful women, and noble men.

Unless a woman is healthy and well formed, she cannot fulfil the duties of maternity, and hence she is unfit for matrimony. She need not be a paragon of womanly beauty, but she should be well shaped, and equal, physically, to the performance of her natural functions. The procreation of healthy, shapely human beings, is certainly far more important than that of cattle. Hence, the physical qualities of the woman about to be married are not to be overlooked. Michelet says, it is the paradise of marriage that the man shall work for the woman; that he alone shall support, take pleasure in enduring fatigue for her sake, and save her the hardships of labor and rude contact with the world. He returns home in the evening harassed; suffering from toil, mental and bodily; from the weariness of worldly things; from the baseness of men. But in his reception at home, there is such an infinite kindness, a calm so intense, that he hardly believes in the cruel realities that he has gone through all the day.

Woman's mission.

It is woman's mission to renew the heart of man. Protected and nourished by the man, she, in turn, nourishes him with love. In love, is her true sphere of labor. It was that she should entirely reserve herself for this, that nature made her so incapable of performing the ruder sorts of earthly toil. Man's business it is to earn money, her's to spend it; that is to say, to regulate the household expenditures better than man would. This renders him indifferent to all enjoyment that is bought, and makes him loathe the embrace of the harlot, — loveless, joyless, unendeared.

Why should he go elsewhere in quest of pleasure? What pleasure is there apart from the woman he loves? It is well said in Eastern law, that the wife is the household. And, better still, the Eastern poet says, "a wife is a fortune." Our western experience enables us to add, "especially when she is poor." Then, though she has nothing, she brings you everything. In general, persons should marry on their own social plane, rather than above or below. The woman who marries a man poorer than herself, is rarely willing to be guided by him. She will not adopt his ideas, his ways of living, and his habits; she will impose her own upon him. If she do not succeed in turning the man into a woman, disputes will arise. The sweet and imperceptible blending of two lives into one will not take place. The grafting of the wife upon the husband will be impossible; there will be no marriage, in fact. To use a homely phrase, the gray mare will be the better horse. But when the wife is the poorer of the two, she is rich in amiability. She loves and trusts; and these are not trifles. But are these all? No! A third something is wanted; and that, she cannot always give. She must understand the man whom she loves. When there is too great a distance between the two, of position and education; when there are many social barriers to be surmounted to bring a couple together, — the danger is imminent. In such cases, much more time, tact, and patience will be required than a business man always has at his disposal. Love, however, laughs at rank, and, like death, levels all classes and distinctions.

The wife, the household.

The rich wife.

Husband and wife should be social equals.

We have seen, in our day, an Austrian archduke give up his position to ally himself with a loved maiden, who was his social inferior, the daughter of

an inn-keeper. Everybody has read the old ballad of "King Cophetua and the Beggar-Maid;" and Tennyson's beautiful poem of the Lord of Burleigh is familiar to all readers of poetry. The mother of William the Conqueror, the first Norman king of England, was first seen by the duke, his father, while she was washing clothes in a stream. Husband and wife should be, in every respect, a unity. The wife should say, in the language of Andromache to Hector, —

"You are my brother, father, my revered mother;
You, my dear lover, young husband are."

The marriage-tie easily severed.

The marriage-tie is, unfortunately, easily severed as the flax, that falls asunder at the touch of fire. The facility of divorce is one of the bad signs of the times and of our own country. Marriage, that deserves the sacred name, should be a union for life: for better or worse; through good report and evil report; in prosperity and adversity. Ceremony, solemnity, and publicity are, doubtless, excellent in their way; but the foundation of all real marriage is in the heart. As the Roman lawyer said, "Marriage is consent;" an act of the will; a freedom, which is voluntarily relinquished; a mutual exchange of hearts; but also a sacrifice of the weaker party, who is giving herself over to the stronger, body and soul, with no stipulation whatever; risks everything for the future. The mother should enlighten her daughter,

The heart, the foundation of all real marriage.

Daughters should be taught by their mothers.

and put her on her guard, as soon as she becomes a woman. At all events, it is her sacred duty to perfectly initiate her daughter before marriage, so that she may know well beforehand to what she is going to consent; what it is that she is to un-

dergo. No compact can be voluntary, or worth anything, if the conditions are not previously known.

Hygienic rules for union of the sexes.

I will now proceed to speak of the hygienic rules relating to the union of the sexes; and, first, as to the proper age of marriage for the female. If the condition of virginity is a state of violence against the impulses of nature,—very different from the free state of the young females of animals, who are subjected, at the period of their loves, to the yoke of passion,—if it is generally admitted that marriage is the state most favorable to the happiness, well-being, and health, of man and woman both, it is important to respond to the call of nature, as soon as the complete development and perfect conformation of all the organs allow. In the infancy of the world, the sexes obeyed, in their union only, the natural sentiment which attracted them towards each other; but philosophers, physicians, and legislators, made of marriage, one of the chief objects of their meditations. Seeking to determine the more or less advantageous influence which might result from it to the people, whose happiness they sought to assure, all agreed that the most serious inconveniences might flow from a premature union of the two sexes. In order to prevent the evil effects of marriage before the full development of the constitution, ancient legislators undertook to determine its epoch. Some of them fixed it at seventeen years for girls, others at eighteen.

Inconvenience of premature marriage.

Marriageable age of women.

Among the Romans, women were authorized by law to marry at the age of twelve years. Lastly, the Athenians, less scrupulous, permitted marriage as soon as individuals believed themselves fit to fulfil

its end. As it would be useless to cite all the laws and opinions relative to marriage, I shall confine myself to saying, that the period ought to vary with the difference of place, of climate, of people, and with the degree of civilization, since these several circumstances may hasten or retard the first appearance of the menses, and the age of complete nubility. Fifteen years is the marriageable age in France, fixed by the present code. The French legislators have permitted marriage at this early period after birth, because they deemed it necessary for the interest of good manners, inasmuch as accidental connections between the sexes might occur at that age; to leave some means by which to repair a fault, and legitimatize children who, but for this provision, would have a false and unhappy position in society. Moreover, if it be recollected that marriage is the most effectual means of removing the evils resulting from the violent desires which are often excited in young girls at an early period, by the education they receive, and by the prevailing customs of society, it will be agreed, undoubtedly, that the law is well grounded in the proprieties of things. Nevertheless, regarding woman only in her physiological aspect, I am constrained to say, by the thorough knowledge which I have of the female system, derived from an immense practice in the diseases of women, that from eighteen to twenty-five years is the age at which women may marry most advantageously. Beside, there is a rule by which we may always guide ourselves, which is, to place at least, two years between the time of marriage and the first appearance of the menses. It is rare for the constitution to have acquired, before this period, the

Author's opinion.

From eighteen to twenty-five years, marriageable age for females.

development necessary for the reproduction of the species. If the indispensable processes of nature, occupied with the completion of the organization, are broken in upon by the premature enjoyments of marriage, the female will be exposed to a thousand risks in her new position. Become pregnant, she will be unable to support, without the greatest difficulty, and at the expense of her health, the innumerable and unavoidable inconveniences of that condition; she will be liable to abortions and hemorrhages; and the pangs of childbirth may cost her, perhaps, her life. Become the mother of delicate and sickly infants, she will pass her youth in uneasiness and tears; give to the offspring of her love an impoverished milk; yield herself, in order to rear them, to cares and watchings beyond her strength; hasten, for them, the approach of old age; and tear herself, perhaps from life, at a period when she is ordinarily strongest and most active. Though premature marriages are not invariably followed by such fatal consequences, we may say, that they always influence, more or less, the physical and moral condition, and hasten the termination, already too precipitate, of youth and beauty.

Premature marriage; consequences of, to woman.

In women who are well formed and fully developed, the first enjoyments generally produce a favorable impression upon the constitution; nevertheless, it sometimes happens that the generative organs become the seat of inflammation, or, that newly-married persons suffer from some spasmodic disorders, which readily yield to absolute repose of the organs and to gentle remedies of a sedative nature.

While a moderate indulgence in the venereal act generally produces beneficial effects, it, when too often repeated, occasions lassitude, feebleness, and gen-

Moderate indulgences beneficial.

eral depression; the beauty is soon destroyed; the grace and freshness of youth are withered; finally, when the abuse of sexual intercourse is kept up, it occasions inflammation and ulcerations in the female organs; disorders of digestion and the nerves; attacks of hysteria and nymphomania; feebleness of all the senses; loss of memory; stupidity; moral inferiority, and disease of the heart; and other maladies terminating in death. Under all the circumstances, young married persons ought to proportion their pleasure to their strength, and shoul l recollect that the first conjugal approaches require certain cares and precautions, the forgetfulness of which might lead to the most unhappy results. When the consummation of the marriage meets with too great resistance, especially when there is disproportion between the organs, the husband, young, full of vigor, and sometimes inexperienced, instead of abandoning himself to all his transports, should seek to overcome the obstacles with care and circumspection. In general, the difficulties which the first essays of marriage present are least during the period of the menses, and for some days afterwards I would suggest the use of unctuous substances, and of bathing in cases of difficulty. If too great a resistance should be met with, far from making violent efforts, that might be attended with danger, some unnatural conformation of the parts ought to be suspected, and the assistance of the surgeon be called in against an obstacle which he alone can surmount without any risk.

Cases of difficulty.

Writer's experience.

In the course of my practice, I have had occasion frequently to afford relief in such cases. A conception is, in general, the natural result of the

genital act; and, though the reproduction of the species is the chief end of marriage, there are yet cases which, however imperious may be the demand of the sexual appetite, should be held as complete obstacles to sexual connection, as regards some women, in whom it threatens to become the fruitful source of dangerous diseases, and often indeed, the cause of death itself.

Deformities which unfit for marriage.

Among the number of deformities which should keep their subjects from marriage, I would place in the first class, those which are capable of preventing the act of generation, or of child-bearing, such as the absence of the vagina or smallness of the pelvis. Any woman imperfectly formed in the last respect, who might become pregnant, would be placed under a cruel alternative, namely, either of undergoing the cæsarean operation, or, at least, of having her offspring sacrificed, and extracted piecemeal. It is true, however, that I have seen some greatly-deformed women with a well-formed pelvis, and lying-in very easily; while there are others who, with all the appearance of a regular conformation, cannot bring their children into the world, and almost inevitably perish, because of a straitened and narrow pelvis. Parents who should suspect the existence of such pelvic deformity in a daughter ought not to consent to her marriage, without first taking the opinion of a capable physician; for, though an examination into the facts of such a case gives a shock to the modesty of a female, such a sentiment ought not to be put into the balance against the life, both of a mother and child.

Narrow pelvis.

Among the disorders that ought to be admitted as obstacles to a legal union, I place pulmonary

Pulmonary consumption, idiocy, insanity, epilepsy.

consumption; aneurism of the heart, and of the large arterial trunks; idiocy; insanity, and even epilepsy, when that disease continues after the case of puberty. I have known husbands who found, soon after marriage, that their wives speedily became permanent invalids, through some family hereditary ailment, become estranged, and, indeed, positively soured towards them, because cheated, as it were, of the usual matrimonial pleasures, and burdened instead with a perpetual bill of expense for medicine and physicians. With these hygienic remarks on marriage, I bring this chapter to a close.

CHAPTER IV.

BEAUTIFUL OFFSPRING.

I open this chapter with a quotation from a work called "Vehse's Court of Austria."

Elizabeth of Brunswick; her beauty.

The Emperor Charles the Sixth of Austria married the beautiful Elizabeth of Brunswick, "the admired of many nations," as Lady Wortley Montague writes. One of her special charms was her maiden-like modesty and bashfulness; the effect of which was heightened by the dazzling whiteness of her complexion, which made her husband call her his "White Lizzy." Nothing could exceed the beauty of her hands. Charles, when he saw her for the first time, in Barcelona, was quite fascinated by her appearance, and said that he never could have believed her to have been so beautiful.

In a letter of the Brunswick privy councillor, Van Imhoff, who accompanied the princess to Spain, it is said, "Le roi aime la reine si tendrement, qu'il ne peut etre presque un mourut sans elle, et des qu'il a un peu de temps a lui il le passe avec la reine, et il est autant frauenmanu (henpecked) que l'Empereur Leopold le fut." A despatch of the Russian envoy at Vienna, Count Podewils, mentions "that she was thought to have entertained little affection for the emperor; but that, as she always treated him as if she was very fond of him, her

attentions and kindness won his heart." "Ambition," the letter adds, "was her principal passion." She was eminently a woman of sense, and possessed great firmness. She took an active part in the conduct of affairs without having the appearance of meddling with them, and frequently managed to turn them according to her own pleasure. With the public in general she was not a favorite, as many people suspected her of not being sufficiently attached to the Roman-Catholic religion, and of still harboring heretical principles." . . .

The house of Hapsburg had, from 1711 to 1716, Charles VI. for its sole representative in the male line. The same thing had happened before, under Leopold I., from 1668 to 1678. Previous to the marriage of Charles VI. with Elizabeth, careful medical inquiries had been instituted through the Jesuit Father, Tomemann — the influential confessor of Charles — concerning the state of health of the princess; and the report was favorable to the pro-pects of her bearing children. Yet the union remained eight years without issue; although the empress, with a view to prompt her constitution, was made to drink strong wines and liquors, owing to which her face retained a flaming-red complexion to the last day of her life. In 1716, at last, she bore a son, the Archduke Leopold; but this prince died six months after his birth; either, as was generally asserted at Vienna, because the aja (governess) had by scornful remarks repeatedly put the nurse into a passion, whereby the milk was vitiated; or, as Lady Mary Wortley Montague states, because the prince was injudiciously weaned too soon. After this, two daughters were born, Maria Theresa in 1717, and Maria Anna in 1718.

The anxious wish of Charles VI. for another male heir was doomed to remain unfulfilled. The empress became pregnant again; and, to excite her imagination, the best painters received orders to decorate her bedchamber in the different palaces with erotic representations of manly beauty and vigor; moreover, Charles VI. caused himself to be crowned and anointed at Prague, in deference to a strange superstition prevalent in Bohemia, according to which, none but a crowned and anointed king was thought able to become the father of male heirs. But the child to which the empress gave birth, subsequently to that coronation (1725), after all, was not a son, but the Archduchess Amalia, who died five years after.

Method of exciting the imagination.

There is no doubt but that mothers who live in an environment of beautiful objects of art bear more beautiful children than those otherwise surrounded. It is well known that the child in the womb is powerfully and strikingly modified by the impressions which the mother receives from the objective world in which she lives. This whole subject is important, and has been ably treated in a work recently published by Dr. H. Jacques, on the "Philosophy of Human Beauty," showing how to acquire and retain bodily symmetry and vigor. The beautiful, says Goethe, is higher than the good, because the beautiful includes the good in it as a part. Human configuration is the result of two forces, — an internal, intellectual, or subjective force, the seat of which is in the brain; and an external, or objective force, residing in whatever is capable of making an impression upon our senses. The fine arts, *tableaux vivants*, spectacles, and imposing ceremonies, in their elevating and beau-

Mothers should be surrounded by beautiful objects of art.

Jacques on physical beauty.

tifying effects upon the face and figure, furnish striking illustrations of this force of external things. It is impossible to doubt that the law which constrains like to beget like is capable of a much wider application than has hitherto been given to it.

Effect of works of art on appearance.

Forms habitually contemplated tend to repeat themselves in our features or in the contours of our bodies. The permanent effect produced upon one's face and figure by a single visit to a gallery of painting and sculpture is doubtless too small to be readily appreciable; but we are by no means justified in affirming that no effect is produced. Let the visit be repeated daily for a few months, or, what is better, let the subject of the experiment be constantly surrounded by fine works of art, and habituated to their contemplation, and their effect will be marked and evident. The wonderful art-loving Greeks understood this; and there can be no doubt but that the worship of gods and goddesses of ideal beauty, wrought in marble or bronze, had an immense influence in perfecting their configuration. It will be readily conceived that the influence of external objects (received through the senses of the mother) must be most effective in moulding the plastic form of the unborn child while yet in process of formation. It was for this reason that the Grecian women placed the statues of their gods in their bedchambers, and made them the objects of constant, loving, and reverent contemplation. In childhood, this modifying influence, no longer indirect, is still

Importance of fine arts.

marvellously efficacious; and, even in mature life, it is not inconsiderable. In the light of this fact, the fine arts assume a new degree of importance and utility. They not only administer immediately and directly to our inherent love of the beautiful, but

serve us still more effectually by increasing continually the available fund of beauty in ourselves and our children.

The beauty of the pictures and statues which adorn the homes of wealth and taste, reflected upon the faces of their inmates, gradually transfigures them. Loving wife and mother, if you would be beautiful, and see beautiful children grow up around you, adorn your rooms with beautiful objects. If you cannot get paintings and statues, you may at least have engravings, statuettes, and medallions, as they are within the reach of every one above the grade of absolute poverty. No sitting-room, parlor, or bedroom should be destitute of them. An engraving of one of Raphael's Madonnas, a head of Christ by Delaroche, and a plaster copy of the Greek Slave, will serve you in place of Apollo, Hyacinthus, and Castor and Pollux. It will be enough that you appreciate and admire their beauty, and love and reverence the physical, intellectual, and moral attributes of which they are the symbols. Impressions, whether physical or mental, are constantly deepened by repetition; and it is impossible for you to be long surrounded by beautiful forms, without a portion of their beauty being transferred to yourself and your offspring. Depend upon it, this is no mere fancy. Beauty begets beauty, always and inevitably. Music, acting upon another sense and co-operating with beautiful objects of sight, is a most effective auxiliary in the grand work of enhancing human beauty. It acts powerfully upon the best elements of our nature, and tends to elevate and harmonize at the same time the character and configuration. Who has not seen the most wonderful changes wrought in the configuration of the face, wrought by

Mothers should adorn their rooms.

Beauty begets beauty.

an impressive piece of music? This expression, in its full extent, is very temporary, of course; but it tends by repetition to permanency, and the effect of a single performance can never be wholly lost. We cannot dispense with the lyre in the physical culture of man. A similar, but a more powerful, influence is exerted by *tableaux vivants*, spectacles, and impressive ceremonies, as exhibited in the theatre, the opera, public shows, and rites of religion. The efficacy of these instrumentalities was well understood by the ancient Greeks, whose fetes in honor of the gods were days of festivity for the whole nation, and made a deep impression upon all. Their plays and spectacles, while they sanctified, as it were, the exercises of the gymnasium, and fired with a noble ambition the hearts of those who engaged, gladdened also the eyes, inspired the souls, and animated the features of every beholder.

We cannot, and would not, restore the Olympic Games; but festivals recurring still more frequently, and adapted to the civilization of the day, should take their place. Our mechanics' exhibitions, our cattle-shows, and our agicultural fairs are excellent things in their way, and should be encouraged and multiplied; but we need, in addition to them, a series of more esthetic festivals, — exhibitions of art, music, and gymnastics. We may take a hint from the *sangerbunds* and *turnevereins* of our German fellow-citizens, the good influence of which he must be a barbarian who doubts. They would aid in the development of our taste, promote joyousness, — which, as a nation, we so sadly lack, — and conduce in every way to public well-being and physical and moral development. The Greek forehead was flat and low, like the front of one of the Greek temples.

Effects of Christianity on personal beauty.

One of the first and most striking effects of the mere spiritualistic religion of Jesus of Nazareth was to raise it to the arched or pointed form, in analogy with the elevated vaults and pointed arcades of cathedral architecture, and to correspondingly change the whole face and its permanent expression. As Christian heads and faces reached an order of beauty beyond what the most favored Greeks ever knew, so did Christian art rise far above Grecian art, in reproducing them. Greece furnished no models for the heads of Jesus and the Madonna. In the first, Christian art succeeded in combining the meekness and enlightened benevolence of the philanthropist, with the rapturous love and high moral elevation of the martyr; and in the second, the modesty of the maid with the ripe affection of the mother. On both, there is that spiritual transfiguration which the artist of ancient Attica had never witnessed or conceived, and, therefore, could not represent. If Christian artists have failed in every other department to rival the ancient Pagans, they have surpassed them here; not because their genius has been greater, but because a new measure of spiritual life and light has been infused into the souls of men. Delaage, a zealous Catholic, claims for his church, that "by the sublime and ravishing harmony of her chants, the bluish wreaths of her ascending incense, the pictures and statues with which she adorns her cathedrals and churches, and the magnificent and impressive ceremonies of her worship, that she brings to bear upon mankind the most powerful objective, as well as intellective forces, friendly to the highest order of beauty, and is thus pre-eminently the promoter of physical well-being;" and, whatever we may think of the dogmas associa-

Influence of Catholic church.

ted with these instrumentalities, we must admit that, so far, he is right, and that Protestantism has unwisely discarded some of the most potent agencies which might have been made available for the spiritual and physical culture of man. So far, Jacques.

A similar line of thought had been suggested to myself while travelling in Catholic countries abroad. The churches are hung with pictures of Madonnas, and of sweet feminine countenances of saints and martyrs.

Observations abroad.

Among the peasant-girls of Spain and Italy, may often be noticed the features of these saintly portraits in the churches actually reproduced in flesh and blood. The traditional statue of the Virgin Mary, which one sees so often in Catholic churches, is that of a most exquisite blonde woman, with straw-colored tresses, — a perfect image of a beautiful, youthful mother. The worship and contemplation of such a

Mariolatry.

statue, by devotees carrying fœtal children in their wombs, cannot fail to beautify the progeny. Pregnant women should, as far as possible, avoid the sight of grotesque creatures, or repulsive objects. The organ-grinder and his hideous monkey, dressed in human habiliments, who are so common a spectacle in the streets of our cities, are more likely, than otherwise, to do harm to the unborn, through the lively impressions received by pregnant women who may chance to be spectators of the monkey's antics, which are caricatures of the movements of human beings. I have known of an instance of a boy marked, as the phrase is, by a monkey, while the child was in its mother's womb. He had quick, restless eyes, and the motions of a monkey, and loathesome, bestial characteristics.

Its influence on pregnant women.



Embryology is full of wonderful phenomena and developments. Its great law is, that like produces like. Darwin, the great English naturalist, in his work on the origin of species, shows to what extent circumstances, and what he calls the struggle of existence, change and modifying species. From the writer whom we have already quoted in this chapter, we quote again. Both the maternal germ, and the vitalizing fluid which is destined to impregnate it, in common with the other secretions, must necessarily be modified by every condition of body or mind to which the individuals in whom they are prepared may be subjected during the process. They must represent, not only permanent traits of character and configuration, but also whatever is temporary and accidental, in physical and mental states; and especially must the condition of body and soul, existing at the moment in which the generative act is consummated impress itself upon the germ thereby vitalized. Thus, a fit of petulance or ill-humor, existing at the time of conception, in a mother ordinarily amiable and sweet-tempered, will be transmitted to her child, marring its character and disposition. Fortunately, also, gentle and loving moods, beautifying and ennobling passions, earnest thoughtfulness, and conditions of health and vigor in the physical system, however temporary, are equally subject to transmission.

The moment of conception.

Influence of disposition of mothers at the time.

O. S. Fowler, in one of his excellent physiological works, mentions the case of a gentleman who chose an occasion of festivity and uncommon social enjoyment, in which his wife had also fully participated, on which to give existence to his youngest child. That child proved to be a child of joy, in every

Instance.

sense, being the very embodiment of good nature and quiet happiness.

Scholars beget scholars, while the children of the ignorant have little aptitude for learning. In the case of the mother, it is not enough that we merely consider the conditions existing at the time of conception, and previously thereto. In endeavoring to account for the mental or physical peculiarities of the child, we must bear in mind, that, during the whole period of gestation, every influence which affects the maternal organism makes a corresponding impression upon the fœtus.

The mother and unborn child.

The same blood which sustains her, nourishes and develops it; the same nervo-vital fluid which circulates through her system, conveying the mandates of the soul to every part, and executing, everywhere, its behests, permeates the soft and impressible form of the unborn child, modifying continually its character and configuration. If her blood be pure and highly vitalized, the fœtal being will be built upon purity and strength; and if the nervous fluid, through which she calls its organs, one by one, into existence, be the messenger of pleasant impressions, happy thoughts, and beautifying emotions only, the unborn being will be moulded into harmony and beauty. So, on the other hand, every disorder of the mother's physical system, and every disturbing passion of her soul, must inevitably corrupt, weaken, and deform her offspring. When a female is likely to become a mother, she ought to be doubly careful of her temper; and, in particular, to indulge no ideas that are not cheerful, and no sentiments that are not kind. Such is the connection between the mind and the body, that the features of the face are

moulded commonly into an expression of the internal disposition; and, is it not natural to think that an infant, before it is born, may be affected by the temper of its mother? Mrs. D. traces minutely, in the diversities of character and disposition of her numerous children, her own life-history during her long maternal career. While pregnant with her first child, she was happy, and in the exercise of her most amiable traits, and it is peculiarly beautiful and sweet tempered. After this, her husband began to drink; which, naturally, darkened the sky of her happiness, and brought into action some of the less lovely attributes of her character. Her next child faithfully represents, in disposition and temper, the state of mind thus induced. Then came poverty, and the consequent struggle with adversity, which, while they called out all the latent energies of her nature, developed also, still further, the unamiable traits already too active; and the character and disposition of the children born during this period correspond; and, so on, through still other changes of an eventful life.

Case of a Boston lady.

A lady of Boston, who had became intensely interested in Napoleon and his exploits, and was accustomed to read everything she could procure relating to him, bore a son during the great conqueror's triumphal career. He inherits the most decided martial tastes, and is so enthusiastic an admirer of Napoleon, that he has covered the walls of his house with pictures of him and his battles. The case of Napoleon himself furnishes a capital illustration of the point under consideration. His mother, while pregnant with him, shared with her husband, and frequently on horseback, the dangers of a military campaign. A lady writes: "From the

Another case.

age of two, I foresaw that my eldest son's restlessness would ruin him; and it has been even so. Yet, he was kind, brave, and affectionate. I read the Iliad for six months before he saw the light, and often wondered if that could have had any influence upon him. He was actually an Achilles. Roussel remarks, that "children have been subject all their lives to convulsions, in consequence of their mothers having during pregnancy been struck with terror or some other powerful emotion." The *Scalpel* relates the case of a man residing in Clarendon, Vt., while crossing the North River, near Albany, in a boat, some years since, was assaulted by another man with a broken oar, and a deep gash was cut through his scalp. In this wounded condition, he returned home to his pregnant wife, who, of course, was deeply horrified at the spectacle. Some seven or eight months afterwards, she gave birth to a child, upon whose scalp was a wound, corresponding in shape and position with that made upon her husband's head. By means of adhesive straps, the wound was made to heal. That the sages of ancient Greece understood the doctrine of fœtal impressions, and saw clearly that the work of perfecting the physical man should begin before his birth, is evident from their teachings. They directed that women, and especially those in the condition of childbearing, should devoutly worship such of their deities as were believed to be deified personifications of masculine beauty; the statues of these gods, as has already been mentioned, were placed in their bedchambers, thus modifying, by their beautiful forms and features of ideal purity, the unborn offspring. A thorough knowledge of these modifying influences, in all their bearings, puts it

Another case.

The Grecian practice.

within the power of parents to predetermine, to an almost unlimited extent, not only the mental and moral qualities of their offspring; but also, and through these, their physical conditions and configuration. Children may be brought into the world intelligent or stupid, amiable or ill-tempered, beautiful or ugly, at will; nor need we stop with this general statement. It is equally true, that any particular quality of organization, contour of figure, or cast of features, even though feebly or not at all developed in the parents, may, through the instrumentality of the means already indicated, be imparted to children. In making this statement, we would not be understood as underrating health and beauty as parental qualifications. All other things being equal, the healthiest and most beautiful parents will produce the healthiest and most beautiful offspring; but plain and comparatively sickly parents, by acting in strict accordance with the principles here set forth, may give existence to healthier and more beautiful offspring than the most favored in these particulars who shall still live in ignorance or in wilful violation of physiological laws. From the principles thus laid down, it follows:—

Principles resulting from foregoing doctrines.

1.—That the highest possible condition of health, physical vigor, mental activity, and moral goodness, on the part of both parents, should be secured and uniformly enjoyed for a considerable time previous to the conjugal union; and the greatest care taken that these conditions be all combined at the moment of conception.

2.—That if any particular faculty or organ be weak in one or both of the parents, it should at such times, by a special determination of the vital fluid to the proper part, be stimulated to unusual activity, that it may be transmitted in greater strength to the child.

3. — That in case any disproportionate or perverted development exist in either parent, manifested in marked faults or defects of character, they should be held in strict subjection at this period, in order that only a normal development may be communicated.

4. — That, if special talents or qualities be desired in offspring, the organs in the parents through which these qualities or talents are naturally manifested should be specially exercised.

5. — That, after conception, the mother should continue to enjoy all the healthy conditions already insisted upon; be adequately nourished; take sufficient exercise in the open air; obey all the laws of her being; and be watched over with the most tender, loving, and thoughtful care.

6. — That, during the first four or five months of her pregnancy, special attention should be paid to the condition of her physical system; and during the remainder of the period, to the state of her intellectual and affectional *nature*.

7. — That, through the whole term of gestation, no efforts should be spared to strengthen and fortify the nervous system, in order to preclude the liability to shocks from fright, or other violent emotions.

8. — That nothing that would promote her happiness should be withheld; and every cause of grief, anxiety, or ill-temper be, as far as possible, at once removed.

9. — That she should be constantly surrounded by beautiful objects, in art and nature, and especially, that she should constantly contemplate images of ideal, physical, and moral beauty, earnestly desiring and willing that her child shall resemble them.

10. — That all ugly, and particularly all deformed and monstrous objects should be carefully shunned, and only those external impressions which are favorable to harmony and beauty received.*

---

* The substance of the foregoing chapter is taken from a work entitled "Physical Perfection, Jacques." This writer has gone over the ground and all the authorities so thoroughly, that I found myself entirely anticipated, and therefore I have availed myself of Mr. Jacques's researches.

CHAPTER V.

PUBERTY.

The young girl at puberty, to be closely watched.

When a young girl shows, by the unfolding of her physical faculties, that she is approaching the completion of her full development, she needs the closest watching, and a management having a different object from that towards which her childish constitution tended. Whereas before puberty, she existed but for herself alone; having reached this age, the spring-time of life, when all her charms are in bloom, she now belongs to the entire species, which she is destined to perpetuate by bearing almost all the burden of reproduction. During infancy, the vital forces tend to act equally upon all her organs; but, at the age of puberty, the chief efforts of the organism are in some sort concentrated upon the sexual parts, whose functions are executed only during the second period of life. As at this period, the instinct of modesty often leads young girls to conceal their first monthly turns, it becomes the duty of mothers to inform of the change they are about to undergo, and to announce to them that the discharge, which they are to become periodically subject to, is a natural function, upon which their health will henceforward depend. Young persons, kept in entire ignorance upon this point, and mistaking their new condition for some shameful weakness, have been known to oppose the salutary

Mothers should inform them of the change.

efforts of nature by means of lotions, injections, and other equally dangerous means. The exact truth, therefore, should be told to girls just arrived at puberty, because, though it is dangerous to know too much, it is more dangerous to be entirely ignorant.

The general attention required by women at entering the brilliant and stormy crisis which is terminated by the appearance of the menses, consists in fulfilling two principal indications; first, to moderate the excitement and disorder resulting from the momentary fulness of the circulatory system; second, so to direct the efforts of nature, that they may exert their chief action on the sexual organs, in which the vital forces ought, so to speak, to centre and terminate.

A carefully regulated diet is, of all means, the most appropriate for fulfilling the first requirement.

A vegetable diet best.

The food of a young girl at puberty ought to consist principally of vegetable substances, of preparations of milk, of the tender meats, and of light and easily digestible substances. Water and cooling drinks should form her chief beverages; solid and highly-seasoned meats, sour and unripe fruits, stimulating articles, alcoholic liquors, and coffee, as well as the daily use of tea, must be carefully avoided; warm baths, taken from time to time, will contribute, together with the diet, to produce a general cleansing effect, and will have the advantage, moreover, of softening the skin, and dispersing the cutaneous eruptions, to which girls are particularly subject at the age of puberty.

Exercise and gymnastics good.

To place the genital organs, especially the womb, in a condition favorable to the appearance of the menses, I should advise gymnastic exercises, walk-

ing and riding, running, the jumping-rope, the hoop, and riding on horseback; lastly, frictions about the pelvis and inferior extremities, the use of flannel-drawers, etc., are additional means very useful for inviting the flow of the menses. If they delay their appearance too long, and particularly if the girl suffers any of the evil effects of amenorrhœa, we should have resort to very warm hip-baths and pediluvia; to aromatic fumigations; to applications of cups to the thighs, and leeches to the vulva. At this period, in particular, the wearing of corsets must be forbidden, and of tight clothing, which hinders the free development of the pelvis, of the thorax, and of the neck, and which might prove the beginning of most of the sad list of diseases to which women are liable through their reproductive organs.

Boarding-schools, and licentious novels.

Young girls should be removed from boarding-schools when they approach the age of puberty, in order to exercise a constant watch over them. We should prevent, as far as possible, the false emotions produced by reading licentious books, especially of the highly-wrought fictions of the modern school, which are the more injurious, as all the faculties become, as it were, overpowered by the desire to experience the sentiment which these works always represent in an exaggerated strain. Frequent visits to the theatre ought to be carefully avoided, because they also may give rise to sensations conformable to the moral condition, which is naturally at puberty already too much exalted.

These powerful exciting agents, and still more frequently, the violent intimacies formed at boarding-school, tear the veil of modesty, and destroy forever the seductive innocence, which is the most charming ornament of a young girl. Endowed with

Liability to the solitary vice.

an organization eminently impressionable, she contracts improper habits, and, constantly tormented by an amorous melancholy, becomes sad, dreary, sentimental and languishing. Like a delicate plant, withered by the rays of a burning sun, she fades and dies under the influence of a poisoned breath. The desires for happiness and love, so sweet and attractive in their native truth, are in her converted into a devouring flame; and solitary vice,* that execrable and fatal evil, soon destroys her beauty, impairs her health, and conducts her almost always to a premature grave. It often happens, that in spite of all the care and precaution of a tender and prudent mother, the imagination of a girl becomes exalted to such a point as to silence the voice of

Preventive means.

reason and shame. In this unequal contest, where nature often gains the victory, means of cure should be resorted, which will withdraw the attention from amorous subjects. Constant occupation of the mind and bodily exercise, taken even to fatigue, will do more good than all the drugs of the apothecary; the old classical fable, which represents the chaste goddess Diana as addicted to the chase, is an ingenious allegory, which seems to prove that the ancients had discovered, in bodily exercises, the power of blunting the stings of love and the amorous propensities. A strict superintendence; a light diet; literary studies; moral and religious counsels; the frequent use of bathing; the precaution never to leave young persons alone, and, especially, to make them retire late and rise early, — such are the means to which we may almost always resort with success.

---

*See "Science of Life; or, Self-Preservation." A Medical Treatise. By Dr. A. H. Hayes.

A directly opposite plan should be adopted for girls who, though arrived at the marriageable age, are cold and indifferent. To such, the culture of the fine arts, the frequenting of balls and theatres, and even the reading of novels, may not be hurtful, and might even prove useful in bringing on the monthly flow, by exciting the sensibility of the generative organs.

CHAPTER VI.

MENSTRUATION.

Physiological definition of menstruation.

The physiologists define menstruation to be a periodical discharge of blood from the vulva, occurring from three to six days in every month, during the whole time that the female is capable of conceiving, or from the period of puberty to what is called the critical age. This discharge is called catamenia, menses, flowers, etc., and the process menstruation. It has been considered peculiar to the human species; but MM. Geoffry St. Hilaire and F. Cuvier assert, that they have discovered indications of it in the females of certain animals. It has been denied, however, that this is anything more than a bloody mucous. At the present day, however, menstruation is maintained to be identical with the *rut* in animals. During the existence of menstruation, the system of the female is more irritable than at other times; so that all exposure to sudden and irregular checks of transpiration should be avoided, as well as every kind of mental and corporeal agitation; otherwise, the process may be impeded, or hysterical and other troublesome affections be excited.

The sacred volume exhibits the feeling entertained towards the female whilst performing this natural function. Not only was she regarded as unclean in antiquity; she was looked upon, as Dr.

Elliotson has remarked, to be mysteriously deleterious. In the time of Pliny, a menstruating female was considered to blight corn, destroy grafts, and hives of bees, dry up fields of corn, cause iron and copper to rust and smell, drive dogs mad, etc., etc.; and it is firmly believed by many, that meat will not take salt, if the process be conducted by one so circumstanced. La Motte had implicit belief in this opinion, and carried the absurdity so far as to assert, that red-haired women are worse than others in this respect; and he gives an anecdote of a red-haired servant of his who spoiled some choice wine, as he was about to sit down to enjoy it. He asserts positively, that the moment she touched the bottles, the wine was turned into vinegar, much to the annoyance of himself and guests. On this subject, Michelet says, that which the middle ages insulted and degraded, and called impurity, is precisely woman's holiest crisis — what constitues her an eminently poetic and religious object. Love had always believed this, and Love was right. The stupid science of the time was wrong. The most vulgar woman, at this period, is not without poetry. Long in advance of, and often in the middle of the lunar month, she gives touching indications of her approaching transformation. Already, the wave is coming, and the tide rising. Whenever woman does not blot out her sex by excessive labor, wherever she remains a woman, she is generally ailing at least one week in four. But the week that precedes that of the crisis, is also a troublesome one. And into the eight or ten days which follow this week of pain is prolonged a languor and a weakness, which, formerly, could not be defined; but which it is now known to be the

Old superstitions in regard to menstruating women.

Woman's holiest crisis.

cicatrization of an interior wound, the real cause of all this tragedy. So that really, fifteen or twenty days out of twenty-eight, woman is not only an invalid, but a wounded one; she ceaselessly suffers from Love's eternal wound.

Woman, an invalid fifteen or twenty days in each month.

Her happiest period.

Columbat says, the interval between the tenth year and the age of puberty is a period of transition in the female, — a sort of passage from childhood to adolescence, — which appears to be the happiest period in her life Her extreme nervous mobility prevents her being too deeply impressed by the grave sentiments that might be fitted to interfere with her happiness. As this stage is, for young females, the period of gentle pleasures and the most unrestrained gayety, it follows that imagination exhibits every object under the most attractive colors, and that the existence of young females is agreeably varied by a piquant freedom of action and a great mobility of tastes and affections. Exempt at this age from cares and troubles, they sing, they weep, and laugh at the same moment; and as their joys, so their pleasures and their grief, as well as all their other impressions, are ephemeral; — they proceed along a flowery path up to the age when nature calls on them for the tribute which they owe to their species. The young girl who, until now, was an equivocal, non-sexual creature, becomes a woman in her countenance, and in all the parts of her body; in the elegance of her stature, and beauty of her form, the delicacy of her features; in her constitution; in the melodies of her voice; in her sensibility and affections; in her character, her inclinations, her tastes, her habits; and even in her maladies. Very soon, all the traits of resemblance

between the two sexes are found to be effaced. The bud newly expanded blossoms among the flowers, and this brilliant metamorphosis is signalized by the rosy tints of the cheeks and lips, and the perfect development which discloses the arrival of the age of puberty. This important period, this first moment of triumph, in which nature seems to renew herself, is announced by a sentiment of necessity to multiply, within the principle of life, and by various striking and admirable phenomena, which put an end to the social inertia in which the young girl had lived from the period of her birth. The sexual system soon becomes a centre of fluxion; nature makes great efforts to establish the periodical discharge; and the whole machine, in its inmost recesses, experiences a succession, a violent commotion, a general movement. Characteristics of puberty.

The new energy of the womb imparts a powerful impulse to the whole system of organs; their functions become more active; the body grows rapidly; the various portions of the figure become more expressed, and bring out those graceful contours that belong to the tender sex alone. At the same time, other important changes take place; the pelvis and the sexual organs, which were in a rudimental condition, now acquire their full proportions; the throat rises and becomes more sensitive; the breasts become rounded and full, while they establish their correspondence and sympathy with the womb. The mons veneris comes out into complete relief, and clothes itself with a thick down, which, like a veil covering the organs of modesty (pudenda), seems to announce that they are soon destined to become fitted to act an important part assigned to them by the law of nature. The mesh

of the cellular and adipose tissue, becoming rapidly filled under the influence of the uterine irradiations, soon impart to the surface of the body a voluptuous plumpness, which lends the highest splendor to the attractive freshness and beauty of youth. The action of the new form of vitality established within the sexual organs, augments more and more, and reacts with energy upon the whole system. Under the sympathetic irradiations of the uterus, the general sensibility becomes changed, and even excited in a peculiar manner. A new sentiment gives rise to desires, which, as yet, have no definite object, — it knows not what. This rising want produces the impression of a touching melancholy, a charming bashfulness, whose principle is founded in ingenuous love, presaging new dispositions, and announcing that the inclinations and habits of childhood are exchanged for other sentiments. The young virgin becomes timid, reserved, abstract, and dreamy. She sighs less for pleasure than happiness; the necessity of loving makes her seek solitude; and this new want that troubles her heart, and engages it wholly, becomes, if it remain unsatisfied, a source of multiplied disorders and derangements. Various causes, which render the play of the vital forces more active, have the effect either of retarding or precipitating the age of puberty; thus, abundant and stimulating food and drinks, manners, habits, and climate, exercise a marked influence upon this vital phenomenon. Certain moral circumstances may likewise accelerate its arrival; but the artificial maturity thus resulting always acts injuriously upon the organization. Among these circumstances may be enumerated, premature passions and pleasures; the arts of

A new sentiment.

Artificial maturity always injurious.

imitation, music, painting; the perusal of obscene romances; the inspection of lascivious pictures; the theatre and the ballroom; the bad examples and the premature libertinism, of which too many examples are unfortunately furnished in great cities. These specimens of premature puberty, the miserable consequence of the great vivacity of the imagination, are sometimes met with as early as the eighth or tenth year. The age at which menstruation commences varies in individuals and climates. It has been esteemed a general law, that the warmer the climate, the earlier the discharge takes place, and the sooner it ceases; but there is reason for doubting the correctness of this prevalent belief. With us, the most common period of commencement is from thirteen to seventeen years. Mahomet is said to have consummated his marriage with one of his wives when she was full eight years old.

Premature puberty.

Age of menstruation varies.

Of four hundred and fifty cases observed at the Manchester Lying-in Hospital, in England, menstruation commenced in the eleventh year, in ten; in the twelfth, in nineteen; in the thirteenth, in fifty-three; in the fourteenth, in eighty-five; in the fifteenth, in ninety-seven; in the sixteenth, in seventy-six; in the seventeenth, in fifty-seven; in the eighteenth, in twenty-six; in the nineteenth, in twenty-three; and in the twentieth, in four. Menstruation commonly ceases, in the temperate zone, at from forty to fifty years. These estimates are, however, liable to many exceptions, dependent upon individual differences. In rare cases, the catamenia have appeared at a very early age, even in childhood; and, again, the menses, with power of fecundity, have continued, in particular instances, beyond the ages that have been specified. In some of these protracted cases,

the catamenia have been regular; in others, the discharge, after a long suppression, has returned. Of seventy-seven individuals, they have ceased in one at the age of thirty-five; in four, at forty; in one, at forty-two; in one, at forty-three; in three, at forty-four; in four, at forty-five; in three, at forty-seven; in ten, at forty-eight; in seven, at forty-nine; in twenty-six, at fifty; in two, at fifty-one; in seven, at fifty-two; in two, at fifty-three; in two, at fifty-four; in one, at fifty-seven; in two, at sixty; and in one, at seventy. Of ten thousand pregnant females registered at the Manchester Hospital, four hundred and thirty-six were upwards of forty years of age; three hundred and ninety-seven, from forty to forty-five; thirteen, in their forty-seventh year; eight, in their forty-eighth; six, in their forty-ninth; nine, in their fiftieth; one, in her fifty-second; one, in her fifty-third; and one, in her fifty-fourth.

A woman at Whitehall, New York, was delivered of a child at the age of sixty-four. Holdefreund relates the case of a female, in whom menstruation continued till the age of seventy-one; Bourgeois, till the age of eighty; and Hagedorn, till ninety. On the other hand, it may be remarked, that in the year 1828, a lady was a visitor at Ballston Springs, who was a grandmother at the age of twenty-eight. A case is also recorded of a female, who menstruated when one year old, and was pregnant at a little over nine. On the twentieth of April, 1834, being ten years and three days old, she was delivered of a child weighing seven and three-quarters pounds.

Cause of early maturity in the Tropics.

It has been successfully shown that the age of puberty is about as early in the cold as in the tropical regions of the earth; and that, were

marriages to take place in the United States at as juvenile an age as in India, or equatorial South America, instances of very early fecundity would be as common here as there. Early marriage, and early intercourse between the sexes, are to be attributed, not to any particular precocity, but to a moral and political degradation, exhibited in ill laws and customs, the enslavement more or less of the women, ignorance of letters, and impure and debasing systems of religion. It has been shown, by statistical evidence, that menstruation does not occur more early in the negress than in the white female. Dr. Vargas, of Caraccas, indeed, in a letter to Professor Meigs, of Philadelphia, affirms, that precocious menstruation is more common in the white than in the colored. As a general rule, the appearance of the menses denotes the capability of being impregnated; and their cessation, the loss of such capability. Yet, females have become mothers without ever having menstruated.

A French medical writer says he attended a woman, who had menstruated but once in seventeen years, although thirty-five years of age, healthy, and the mother of five children. There is a case recorded in the books, of a mother and daughter, both of whom were mothers before they menstruated. There is another case of a young woman, who married before she was seventeen, and, having never menstruated, became pregnant; four months after her delivery, she became pregnant again; and four months after the second delivery, she was a third time pregnant, but miscarried; — after this, she menstruated for the first time, and continued to do so for several periods, when she again became pregnant. Yet, Dr. Dewees asserts, that there is not a

properly attested instance on record of a female conceiving previous to the establishment of the catamenia.

The quantity of blood discharged in menstruation is from four to ten ounces; but in this, there is much variety. The discharge continues from two to eight or ten days. In some relaxed constitutions, there is occasionally not more than a week's interval; and, in general, the more lax the constitution, the larger is its discharge, and the longer is its continuance. The indolent, the sanguine, and the luxurious, have generally a large periodical evacuation. When the menses have been suppressed, and there is a copious discharge of blood from the mouth, it will generally be found to benefit the person; and the physician, who is acquainted with the philosophy of this matter, and knows sufficiently of his business to detect this discharge from a discharge of fresh blood from a rupture of the lungs, will not regard it as an unfavorable symptom for the health of his patient until he can restore the evacuation to its proper and usual course. Bleeding at the nose, to a certain extent, is favorable in cases of suppressed menses.

Suppression of menses.

When there is a suppression, independent of pregnancy, it generally results in disease, runs into tumors or cancers, attended with pains, uneasiness, or a disturbance of the functions. In this weak state, women often continue for years. The most frequent causes of suppression are exposure to cold, frights, falls, sometimes fever, anxiety of mind, or confinement by ill-health. I have found, in my experience, numerous cases of consumption, fits, and sometimes insanity, arising from the want of proper attention to these matters; but where I have been consulted in season, I have seldom failed to afford

Causes of.

the desired relief. Difficulty of menstruation is a similar disorder, and a serious one, for it prevents conception. I have treated numbers afflicted with difficult menstruation, and always with the most gratifying success, seldom failing of a perfect cure. Excessive menstruation is a difficulty with which females are sometimes sorely troubled. From the experiences of my practice, I can say that it is easily curable, if correctly understood and properly treated. It is now generally acknowledged that menstruation, as well as conception, is dependent on the existence and influence of the ovaries. The ovarian vesicle was first discovered by De Graaf, from whom it received its name. Menstruation is the consequence of the periodical maturation and rupture of a Graafian vesicle with the escape of an ovum from the ovary into the Fallopian tube, which is washed away by the menstrual blood. It is based on the physiological law of the sex, that an embryonic germ is developed and brought to perfection at stated intervals, corresponding nearly with the revolution of the lunar period of twenty-eight days each; one ovum being ripened every month. An impression prevails, that, excepting within a short period before and after menstruation, the female is not likely to conceive.

Writer's success in treating suppressed menses.

Menstruation dependent on influence of the ovaries.

After the expiration of ten days, it is alleged that there is no liability whatever to impregnation on the part of the female, and that sexual intercourse may be indulged in without the usual consequences. But there is no certainty that conception will not follow a coitus which takes place even twelve days after the cessation of the catamenial discharge. Physiologists are obliged to confess that we have not, after all, approached in the slightest degree to a

After ten days, it is not certain that pregnancy will not follow cohabitation.

knowledge of the purpose served by the periodical catamenial discharge. Undoubtedly, the aptitude for conception is greater immediately after menstruation. The period of the final cessation of the menses is variable; and, even in healthy females, the change may be attended by phenomena requiring discrimination on the part of the physician. This period is also which often excites the fears of females. In a few cases, the uterine functions acquire an increased activity shortly before their final cessation, so that females who have not had children for years, or who have been barren hitherto, have unexpectedly become pregnant. More frequently, however, females mistake the symptoms often attending the cessation of the menses, for those of pregnancy. The passing over of the menstrual period; swelling and pain of the breasts; the sickness and disorder of the stomach, and capricious state of the appetite; the increase in size, and the movements occasioned by flatulence, of the bowels often accompanying this epoch, sometimes induce a belief, even in the mind of an experienced female, that she is pregnant;—and her exact state can be determined only by an examination per vaginam, by time, or by the exhibition of purgatives.

Menstruation does not cease at once.

Menstruation rarely ceases at once, when the usual age at which it disappears is arrived at, unless some accidental circumstance, as fright, exposure to cold, an acute illness, etc., occurs and occasions it. More commonly, the change is gradual, and is attended by irregularities as to the intervals between the periods, and the abundance or scantiness of the evacuation.

Fitful returns of discharge.

Sometimes, the discharge returns every two weeks, then ceases for several weeks, or even months, and afterward recurs for a few periods

as regular as ever, and then ceases altogether. Many females of delicate constitution, who have complained much during the earlier epochs of their existence, or who, up to the period of this change, have been liable to hysterical and nervous ailments, have subsequently enjoyed a much better state of health, and lived long and healthily, when this change has been brought about carefully and fortunately. During the functional activity of the uterine organs, and while these organs are highly susceptible of irritation, many of the disorders depending upon irritation of them are more or less frequently experienced; but when these organs undergo the change characterizing this epoch of life, the susceptibility of irritation subsides, and gradually disappears; and consequently, the disorders which they originate are no longer felt. On the other hand, when disease already exists in some organ, or even when a predisposition to disease exists, the cessation of the menses generally aids in aggravating the former, or in developing the latter. A disorder, or even an organic lesion, which may have been so slight or so little advanced as to escape detection as long as the menstrual discharge has continued, and has proved a periodical derivation from the affected organ, and a recurring evacuation of the vascular system, will no longer thus remain latent, or continue stationary, but will assume a rapid and active form. The maladies which most commonly become thus developed are the various organic and malignant diseases of the uterus and mammæ; gout, apoplexy, and paralysis; organic diseases of the liver; dropsies; structural changes of the lungs; cutaneous eruptions; ulcer of the lower extremities; hemorrhoidal affections; epilepsy, hysteria, and

Change of life followed by better health oftentimes.

Latent disorders developed after change of life.

mental disorder, etc. In many cases, leucorrhœa occurs and continues long at this epoch, and powerfully tends to prevent the vascular fulness which might develope and aggravate these or other diseases. In some instances, hemorrhoids supervene, and have the same effect; and even the appearance of cutaneous eruptions, or ulcers in the extremities, exert some degree of derivation from an organ exposed to serious disease. The medical management of impending disease at this epoch is of great importance, and the earliest indications of disorder should be carefully watched and duly estimated. Signs of vascular fulness, of local congestions, and of oppression of any organ, ought to be met with local depletions, which should be repeated according to the circumstances or urgency of particular cases. Vascular fulness, or obstruction of the bowels, are the pathological conditions of this period of life; and although local bleedings are necessary to remove impending mischief, still, diet and regimen are the means on which we should chiefly depend for the permanent removal of the evil. A regular state of the bowels; the occasional exhibition of a mercurial, to promote biliary secretion; a light farinaceous and vegetable diet, or a very moderate use of animal food, and regular exercise in the open air, — are means which are applicable to all cases characterized by vascular fulness or congestions. When disease of some internal organ is actually present, and when the more acute or active state has been subdued by depletions and other appropriate means, perpetual blisters, setons, and issues will prove of service in removing the remaining irritation, and in preventing a recurrence of vascular determination to, or

Earliest indications of disorder should be carefully watched.

Diet and treatment.

congestion of, the affected organ. In all cases, the treatment should mainly depend upon the states of the vascular system, in connection with those of the chief viscera; nevertheless, the nervous manifestations require attention. If the nervous system be morbidly susceptible or sensitive, the vascular system being neither too full nor oppressed, means should be used to impart energy to it, and thereby, as well as by other agents, to remove this condition. If it be connected, as is sometimes the case, with a deficiency of the blood, the ferruginous or iron tonics should be prescribed; and if painful or convulsive disorders be associated with this state of the vascular system, narcotics, anodynes, and antispasmodics may be joined with these. In most cases of sudden seizure, attended by convulsions, — whether epileptic or hysterical, — although following the cessation of the menses, antispasmodics and anodynes constitute a principal part of the treatment; and even local depletions should be cautiously and sparingly employed, unless the signs of general and local fulness be quite conclusive, and then they ought to be resorted to in conjunction with the remedies just mentioned. Sometimes there is an absence of the menstrual discharge at the period of life when it is usually regularly established, or the suspension or suppression of it after it had recurred regularly for some time. The menstrual discharge may be delayed or absent, owing to functional inactivity or disorder, or it may be obstructed or retained by organic change. In some persons, menstruation does not make its appearance until four or more years after the usual period. This is simple amenorrhœa. Some cases of simple amenorrhœa are actually instances of protracted puberty, the whole

Late appearance of menses.

frame betraying imperfect growth; but care should be taken to ascertain the nature of the case, and the absence or presence of malformation or obstruction. Simple amenorrhœa occurs in persons of full habit, conjoined with rigidity of fibre and robust health; and again, in persons deficient in blood, or of relaxed fibre, associated with paleness, and a weak or delicate constitution. In both, an apparent attempt at menstruation occurs occasionally, or even monthly, and is characterized by pains in the back and loins; by weight in the lower part of the abdomen; by aching in the tops of the thighs, with lassitude and uneasiness. After two or three days, these symptoms cease without any menstrual evacuation, or merely with a discharge of the whites, and are often succeeded by severe headaches, with an incapability of bearing light and sound. In the more plethoric cases, these sufferings are severe, and occur occasionally between the efforts at menstruation, and are attended by flushings and throbbings of the face and head; quick, full pulse; thirst, and general febrile symptoms. In the pale and delicate, there is little or no fever; and the symptoms are slighter and more chronic. As these disorders continue or occur, the functions of the digestive organs languish; the bowels become irregular; the countenance pale; the strength reduced; and the breathing short; and the general health gradually declines. Various hysterical symptoms, or even several hysterical paroxysms, particularly in the more plethoric cases, occasionally appear. In the more delicate class of cases, simple amenorrhœa causes the patient to pass into chlorosis, or into tubercular consumption. In a few cases, however, diarrhœa, or some discharge, occurs, and protects for a time the patient

Symptoms.

Chlorosis and tubercular consumption.

from the more dangerous consequences of the obstruction.

The treatment of this form of amenorrhœa is by local or even general bleeding; when the complexion is florid and the habit full, by applying leeches to the vulva, and by cupping on the loins, or by active purging by means of aloes, extract of colocynth, etc., with myrrh, etc. The emmenagogue purgatives may be given with the stimulating emmenagogues. The patient should live partly or chiefly on fish and shell-fish, and take regular and active exercise in the open air, and use the hip-bath.

Bleeding and cupping.

The next kind of obstructed menstruation is caused by malformation of the reproductive organs, or the absence of one or more of them, such as the uterus, the ovaria. Then the canal of the cervix uteris may be nearly or quite obliterated. A false membrane may cover the mouth of the womb. The vagina may be wanting. The hymen may be what is called imperforate. Where there is a deficiency of the ovaria, there is a more or less masculine development of the body at the period of puberty. The breasts and external organs of generation are not fully developed; the sexual propensities are not manifested; the voice is harsher and deeper than usual; and a beard is observed on the upper lip. The general health may not be affected. It is obvious, that where the uterus and ovaria are wanting, or not properly formed, no means can be of service. When the menstrual discharge is accumulated in the uterus, and has only been obstructed mechanically, the removal of the obstruction is followed by the escape of a dark, thick, treacle-like fluid, which continues to run for some days, as the uterus slowly contracts. Dr.

Obstruction from malformation.

Churchill recommends the vagina to be syringed in these cases with warm water, and a broad binder to be applied around the abdomen.

Arrest of menstruation from pregnancy.

Pregnancy cannot be inferred to be the cause, when the suppression of the menses takes place suddenly, or from any of the more energetic causes producing it, during the period of the discharge. The arrest of menstruation by conception is generally unattended by other unpleasant symptoms, but it is commonly followed by morning sickness and by alteration of the size of the breasts.

Difficult menstruation.

Difficult menstruation is a form of uterine disorder which is of frequent occurrence, and is not only productive of extreme suffering, but often of very serious consequences.

Prevents conception; causes abortion.

It often prevents conception; and, if pregnancy has occurred during its continuance, there is risk of abortion. Although in itself it is not a fatal malady, yet malignant diseases have followed its protracted existence; and it is generally very difficult of cure. Both married and single females, the latter more particularly, are liable to it.

Three kinds of.

Difficult menstruation occurs in all temperaments and habits of body; but more frequently in women of irritable, hysterical, and nervous temperaments, and of spare, scrofulous, and phthisical constitutions, than others. It is of three kinds, — neuralgic, inflammatory, and obstructive, or mechanical. In neuralgic, the monthly paroxysms of pain have all the characteristics of neuralgia. The suffering is often very great. All the forms of dysmenorrhœa, or difficult menstruation, when very severe, generally prevent conception; but the slighter degrees of the complaint will not have this effect. In one of the severest and most obstinate cases for which I have been consulted, the patient had a family after

marriage. There is another kind of morbid menstruation, called excessive menstruation, technically denominated menorrhagia, a word compounded of two Greek terms, implying a menstrual rupture, or bloody flux.

Excessive menstruation.

The quantity of blood discharged from the uterus at each menstrual period has been variously estimated. In temperate climates, it varies from four to ten ounces; from five to seven or eight being the usual amount in the country. Less than four may be considered as scanty; and nine or ten, excessive. That climate influences the quantity of this discharge is extremely probable; but I do not believe that it has this effect nearly to the extent estimated by some writers, for it is impossible to obtain precise information upon the subject. Even when the quantity is unusually large, the discharge may take place in a short period, or during a longer time in recurring gushes; or it may continue for a long period, as a slight or moderate drain. Menorrhagia is often mistaken for early abortion, or for organic disease of the uterus. Irregular menstruation is that in which the discharge is premature, and afterwards ceases, and again recurs, after irregular and prolonged periods. Offensive or otherwise morbid catamenia are occasionally observed. I was once called to a young lady, about seventeen years of age, in a boarding-school, who was suffering in a distressing manner, in consequence of the irritating and offensive state of the catamenia. There had been no detention of the discharge; but it was so irritating as to inflame the vagina, the labia, and insides of the thighs, severe erythema extending along the limbs, and for a considerable distance over the hips, and confining her for several days

Five to seven or eight ounces of blood usually discharged.

Irregular menstruation.

Offensive catamenia.

An instance.

to bed. She had suffered in a much less severe manner, in some of the preceding menstrual periods. I have since met with instances of this state of the catamenia being complicated with erysipelas. The offensiveness of the catamenia is generally owing to a morbid state of the circulating fluids. The discharge in these cases is very dark black, or pitchy, or greenish-black, and very offensive; and it is at other times pale or serous.

Cause of offensive discharge.

CHAPTER VII.

MATERNITY (PHYSIOLOGICALLY CONSIDERED).

Conception usually takes place without the slightest consciousness on the part of the female; hence the difficulty of reckoning the precise period of gestation, or carrying the fœtal child in the womb. Certain signs, as shivering, pains about the umbilicus, etc., are said to have occasionally denoted its occurrence; but they are rare exceptions; and the indications afforded by one female are often extremely different from those presented by another. In animals, in which generation is only accomplished in a period of generative excitement, the period of conception can be determined with accuracy; for, in by far a majority of such cases, a single copulation fecundates, — the existence of the state of *heat* indicating that the generative organs are ripe for conception. In the human female, where sexual intercourse can take place at all periods, conception is by no means as likely to follow a single intercourse; for, although she may be always susceptible of fecundation, her genital organs are rarely, perhaps, so powerfully excited as in the animal during the season of love. It is not for the physiologist to inquire into the *morbid* causes of sterility in either male or female, nor is it desirable to relate all the visionary notions which have prevailed regarding the circumstances that favor con-

Conception,

ception. It would appear that more women bear children between the ages of twenty-six and thirty years, than at any other period.

Sex of child beyond control of parents.

Conception being entirely removed from all influence of the will of the parents, it is obviously not within their power, by any exercise of their will, either to determine the sex of the child begotten at a given time, or to determine its physical or moral character. Yet idle and absurd schemes have been devised for both one and the other. The older philosophers, as Hippocrates and Aristotle, believed that the right testicle and ovary furnished the rudiments of males, and the same organs on the left side, those of females; and some of the old writers on breeding assert that such was the result of their experiments with the ram. These statements gave rise to a pretended "art of procreating the sexes at pleasure," which has been seriously revived in our own time. A French medical writer made the wild assertion, that he could so manage the position of the woman during copulation, that she should certainly have a boy or girl, as might have been determined upon; in confirmation of which, he published the names of mothers who had followed his advice, and succeeded to their wishes! But this pretended power of determining the sex of a child to be begotten at pleasure, has been demonstrated to be an absurdity and mere pretence. As if the parents, who are the mere instruments of creative power, could, under the advice of some medical charlatan, interfere and modify the operation of that power to suit their pleasure!

Transmission of qualities.

It is an ancient opinion, which seems to be in some measure confirmed by what we notice in certain animals, that the character of the offspring is



largely dependent upon the moral and physical qualities of the parent, and it has been fancifully maintained that the race of men of genius may be perpetuated by uniting them to women possessed of the same faculties. It is an old view, that the procreative energy of the parents has much to do with the mental and corporeal activity of the offspring. Hence it is that bastards have been presumed to excel in this respect. Such is the idea of Burton, in his "Anatomy of Melancholy;" and the same idea is put, by Shakespeare, into the mouth of Edmund, —

> "Why brand they us
> With base? With baseness? bastardy? base? base?
> Who, in the lusty stealth of nature, take
> More composition and fierce quality,
> Than doth within a dull, stale, tired bed,
> Go to the creating a whole tribe of fops,
> Got 'tween sleep and wake!"

Much doubtless depends upon the condition of the parents, as regards their organization and strength of constitution. The remark, "fortes creantur fortibus et bonis," is true within certain limits; but we have no proof that the ardor of the procreative effort can have any such influence; and the ratio of instances of bastards, who have been signalized for unusual vigor — mental or corporeal — to the whole number of illegitimates, is not greater than in the case of those born in wedlock. There are grounds for believing that the stronger individual regulates the sex of the progeny. It would appear, that on the average, about one infant in twenty is still-born. Three facts are worth recording here. First, That the dangers and difficulties of parturition are greater to the mother in male than in female births. Secondly, That the dangers

Still-born.

and accidents from parturition, and its results, are greater to the child in male than in female births. And, Thirdly, That, for the very marked difference between the perils and difficulties, both to the child and the mother, in male, from that which exists in female births, there is no other traceable cause except the larger size of the head of the male child.

Superfœtation. It is a question in physiology, whether two conceptions may not undergo their respective developments in the womb, and be delivered at an interval corresponding to that between the conceptions. Buffon cites a case of a female at Charleston, South Carolina, who was delivered in 1714 of twins, within a very short time of each other. One of these was black; the other, white. The circumstance led to an inquiry; when the woman confessed, that on a particular day, immediately after her husband had left his bed, a negro entered her room, and compelled her to gratify his wishes under threats of murdering her.

Pregnancy. When the fecundated ovum or egg that has been fertilized by the seed from the male organ of generation has been laid hold of by the fimbriated extremity of the Fallopian tube, and through this channel, — perhaps by the contraction of the tubes, and the ciliary motions of its lining membrane, — has reached the cavity of the womb, it forms a union with that viscus, to obtain the nutritive fluids which may be required for its development, and to remain there during the whole period of pregnancy, or utero-gestation. When the ovum, or fertilized germ-cell, attains the interior of the womb, which it probably does within the first ten or twelve days after conception, it forms, in a short space of time, a connection with the uterus by means of the pla-

centa. During the development of the embryo, it is necessary that the uterus should be correspondingly enlarged, in order to afford room for it, as well as to supply it with its proper nutriment. In the first two months, the increase of size is not great, and chiefly occurs in the pelvis; but in the fourth, the increase is more rapid. During the next four months, it increases; that is, the embryo child increases in every direction, occupying a larger and larger space in the cavity of the abdomen, and crowding the viscera into the flanks and iliac region. The length of the uterus at the full period has been estimated at a foot; its transverse diameter, at nine inches; its circumference, on a level with the Fallopian tubes, at twenty-six inches; and at the uterine portion of the cervix uteri, thirteen inches. Its weight, which before pregnancy was from fourteen to eighteen drachms, is, at this time, from a pound and a half to two pounds. Along with the changes that supervene in the generative apparatus during pregnancy, the whole system commonly sympathizes more or less in the altered condition. Some females, however, pass through the whole course of gestation with but slight or no disturbance of the ordinary functions; whilst with others, it is a period of incessant suffering. One of the earliest and most common signs is the suppression of the catamenial discharge; but, of itself, this cannot be relied on, as it may result from disease. Soon after impregnation, the female is affected with nausea and vomiting, especially in the morning after rising; the appetite is most uncertain — articles of food that previously excited loathing, being at times desired or *longed for* with the greatest avidity, whilst, on the contrary, cherished articles

Signs of pregnancy.

Stoppage of the menses.

of diet cannot be regarded without disgust. The sleep is apt to be disturbed; the temper unusually irritable, even in those possessed of remarkable even dispositions at other times. The breasts enlarge and become knotty, and sometimes darting pains are felt in them; and a secretion of a whitish serum can often be pressed out. The areola round the nipple becomes of a darker color in the first pregnancy than it is in the virgin state, and it is darker during each successive pregnancy than when the female is not pregnant. There is also a puffy turgescence, not alone of the nipple, but of the whole surrounding disk. These appearances constitute one of the best single proofs of the existence of pregnancy, though not always proof positive. A bluish tint of the vagina has also been affirmed to be a sure test of pregnancy. It is the general opinion, that the blood of pregnancy always presents the buffy coat and other characters of inflammation; and this has been reckoned as one of the rational signs of pregnancy. In fact, pregnancy, when far advanced, sensibly changes the blood.

A German physician gives it as the result of an eighteen years' obstetrical practice, that pregnancy is always accompanied by a peculiar smell of the vaginal mucous, a musty odor resembling that of semen. The urine in pregnant women is said also to undergo a modification, and to contain a peculiar substance or pellicle, which forms on the surface after it has stood from two to six days. It is called kyestein, and is, in appearance, a whitish, fatty sub-

Quickening. stance. Along with the signs already mentioned, the uterus gradually enlarges; and about the end of the eighteenth week, sooner or later, *quickening*,

as it is usually but erroneously termed, takes place, or the motion of the child is first felt. Prior to this, — from the moment, indeed, of intercourse resulting in pregnancy, — the female is *quick* with child; but it is not until then, that the fœtus has undergone the development necessary for its movements to be perceptible. This occurrence establishes the fact of pregnancy, whatever doubts may have previously existed. Where there is much corpulence, or where the fluid surrounding the fœtus is in such quantity as to throw obscurity round the case, it may be necessary, for the purpose of verifying the existence of pregnancy, to institute an examination *per vaginam*, as it is called. This can rarely afford much evidence prior to the period of quickening; but, after this, the examination, by what the French term, the *mouvement de ballottement*, may indicate the presence, or the contrary, of the fœtus in utero.

Examination *per vaginam.*

This examination consists in passing the forefinger of one hand into the vagina, — the female being in an erect attitude, — and giving the fœtus a sudden succussion, by means of the other hand placed on the abdomen. In this way, a sensation is communicated to the finger placed in the vagina, which is often of an unequivocal character. Of late years, the application of the stethoscope has been used as a means of discrimination in doubtful cases. By applying this instrument to the abdomen of a pregnant female, after the fifth month, the beatings of the heart of the fœtal child are audible. This instrument may indicate also when the pregnancy is multiple, by the pulsations of two or more distinct hearts; according as it is double, triple, etc. However, it is asserted that the sound has been heard in

cases of tumor in the womb and other kinds of tumors. The pulsations of the heart of a fœtal child vary from one hundred and twenty to one hundred and eighty in the minute.

Many uneasy feelings attendant upon pregnancy are owing to the increased size of the uterus. These occur more especially during the latter half of pregnancy. The parietes of the abdomen may not yield with the requisite facility, so that pain may be experienced, especially as the part where the soft parietes join the false ribs. The pressure of the uterus upon the vessels and nerves of the lower extremities occasions enlargement of the veins of the legs; transudation of the serous part of the blood into the areolar tissue, so as to cause considerable swelling of the feet and ankles; numbness, or pricking, of the lower limbs, and the most violent cramps, especially when the female is in the recumbent posture, so that she may be compelled to rise suddenly from the bed several times in the course of the night. The same pressure exerted on the bladder and rectum, especially during the latter months, brings on a constant desire to evacuate the contents of those reservoirs.

Duration of pregnancy.

The duration of human pregnancy has given rise to much discussion While it is agreed on all hands that nine calendar months is the usual period of utero-gestation, it is maintained by many high authorities and accomplished accoucheurs, that pregnancy might be protracted to nine-and-a-half, ten, or even eleven calendar months. The difficulty that arises in fixing upon the precise term is owing to the impracticability, in ordinary cases, of detecting the time of conception. But few cases exist where conception has taken place after a single intercourse. In one

reported case, where the exact time of conception was known, the child was born exactly two hundred and eighty days from the time of conception. The usual durancy of pregnancy may be set down as from thirty-nine to forty weeks, or from two hundred and seventy to two hundred and eighty days.

Cessation of the menses, a fallacious guide.

The sensations of the female are fallacious guides, and, accordingly, she is usually in the habit of reckoning from ten days after the disappearance of the catamenial discharge; but pregnancy might have taken place on the very day after their cessation, or not until a day prior to the subsequent period; so that, in this way, an error of ten days at least is liable to occur in the estimate. And again: it does not *always* happen that the menstruation immediately succeeding is arrested. The period of quickening, which generally happens about the eighteenth week of pregnancy, does not afford us more positive evidence, seeing that it is liable to vary, being experienced by some females earlier, and by others somewhat later. I am, however, justified in stating, that the ordinary durancy of pregnancy is ten lunar months, or forty weeks; but I have no less hesitation in affirming, that it may be protracted, in particular cases, much beyond this.

Cases.

In a case detailed by Dr. Dewees, an opportunity occurred for dating with precision the time of conception. This case also shows that conception does not necessarily stop the succeeding catamenial discharge. The husband of a lady, who was obliged to absent himself for many months on account of embarrassment of his affairs, returned one night clandestinely,—his visit being known only to his wife, her mother, and Dr. Dewees himself. The lady was, at the time, within a week of her men-

strual period; and, as the catamenia appeared as usual, she was induced to hope that she had escaped impregnation. Her catamenia did not, however, make their appearance at the next period; the ordinary signs of pregnancy supervened; and in nine calendar months and thirteen days from the visit of her husband, she was delivered. Another case is recorded of a woman in North Carolina, who went either two hundred and ninety-three or two hundred and ninety-six days before delivery. The University of Heidelberg allowed the legitimacy of a child born at the expiration of thirteen months from the date of the last connubial embrace. A case of gestation protracted to three hundred and seventeen days, was admitted in Cambria County, Pennsylvania, in the year 1844. Such a case, though unusual and improbable, was not regarded as impossible.

When a child is viable.

A like uncertainty exists as to the earliest period at which a child is *viable*, or capable of carrying on an independent existence. The period is generally fixed at near the end of the seventh month; but children have lived some time that have been born earlier. Children born at the expiration of twenty-five weeks and six months have lived some time, though barely alive when born, with little motion, too feeble to cry, and without hair or nails.

Parturition.

At the end of seven months of utero-gestation, or even a month earlier, the fœtus is capable of an independent existence, provided, from any cause, delivery should be hastened. This is not, however, the *full period;* and although labor may occur at the end of seven months, the usual course is for the fœtus to be carried until the end of about ten lunar months. If it be extruded prior to the period at

which it is capable of maintaining an independent existence, the process is termed *abortion*, or *miscarriage;* if between this time and the full period, it is called premature labor. From certain records, abortion, or premature labor, has been estimated to occur, on the average, once in seventy-eight and a half cases. With respect to the causes which give rise to the extrusion or pushing out of the fœtal child at the expiration of the full period of pregnancy, we are in utter darkness. Our knowledge appears to be limited to the fact, that when the fœtus has undergone a certain degree of development, and the uterus a corresponding distension and organic changes, its contractility or power of contraction is called into play, and the contents of the womb are beautifully and systematically expelled. In cases of twins, the uterus will admit of still greater distension, before its contractility is aroused. A day or two preceding labor, a discharge is occasionally observed from the vagina of a mucous fluid, more or less streaked with blood. This is called the *show*, because it indicates the commencement of some dilatation of the neck, or mouth, of the womb — the forerunner of *labor* or *travail*. The external organs, at the same time, become tumid and flabby. The mouth of the womb, if an examination be made, is perceived to be enlarging; and its edges are thinner. Along with this, slight grinding pains are experienced in the loins and abdomen.

Beginning of the pains.

After an uncertain period, pains of a very different character come on, which commence in the loins, and appear to *bear down* towards the os uteri, or mouth of the womb. These are not constant, but recur at first after long intervals, and then after shorter; the body of the uterus manifestly con-

tracting with great force, so as to press the ovum down against the mouth of the womb, and dilate it. In this way, the membranes protrude through the os uteri with their contained fluid, the pouch being occasionally termed *bag of waters*. Sooner or later, the membranes give way; the *waters* are discharged; and the uterus contracts, so as to embrace the body of the child, which was previously impracticable, except through the medium of the *liquor amnii*. At the commencement of labor, the child's head has not entered the pelvis, the occiput being generally towards the left acetabulum; but when the contractions of the womb become more violent, and are accompanied by powerful efforts on the part of the abdominal muscles, the head enters the pelvis; the mouth of the womb becomes largely dilated; and the female is in a state of agitation and excitement, owing to the violence of the efforts and the irresistible desire she has of assisting them as far as lies in her power. When the head has entered the pelvis, in the position in which the long diameter corresponds to the long diameter of the pelvis, it describes, laterally, an arc of a circle, the face passing into the hollow of the sacrum, and the occiput behind the arch of the pubis. By the continuance of the pains, the head presents at the vulva. The pains now become urgent and forcing. The os coccygis is pushed backwards, and the perineum is distended — at times so considerably as to threaten and even undergo laceration; the anus is also forced open and protruded; the nymphæ and caruncalæ of the vagina are effaced; the labia separated; and the head clears the vulva from the occiput to the chin,

The birth. experiencing a vertical rotation. When the head is out, the shoulders and the rest of the body readily

follow, on account of their smaller dimensions. The child, however, still remains attached to the mother by the navel-string, which has to be tied, and divided at a few fingers' breadth from the navel. After the birth of the child, the female has generally a short interval of repose; but after a time, slight bearing-down pains are experienced, owing to the contraction of the uterus for the separation of the placenta and membranes of the ovum, called the *secundines*, or *after-birth*.

The process of parturition, or child-birth, is accomplished in a longer or shorter time in different individuals, and in the same individual in different labors, according to the particular conditions of the female and fœtus. The parts, however, when once dilated, yield much easier afterwards to similar efforts; so that the first labor is generally the most protracted. After the separation of the secundines, the female is commonly left in a state of debility and fatigue; but this gradually disappears. The womb also contracts; its vessels become small, and their openings are stopped up. For a short time blood continues to be discharged from them; but as they disappear, from the return of the womb to its usual size, the discharge loses its bloody character, and is replaced by one of a paler color, called lochia, which gradually disappears, and altogether ceases in the course of two or three weeks after delivery. For a day or two after delivery, coagula of blood form in the interior of the uterus, especially in the second and subsequent labors, which excite the organ to contraction for their expulsion. These contractions are accompanied with pain, and are called after-pains; and as their object is the removal of that which interferes with the return of the uterus

to its proper dimensions, it is obvious that they ought not to be officiously interfered with. While the uterus is contracting its dimensions, the other parts gradually resume the condition they were in prior to delivery; so that, in the course of three or four weeks, it may be impossible to pronounce positively whether delivery has taken place or not. The presence of shining, broken streaks, like the remains of cracks, in the skin of the abdominal parietes, or walls of the abdomen, has been regarded as a sign of some value as indicating that delivery has taken place; but this sign is often wanting where delivery has occurred; and it will be readily understood that any cause of distension may produce these streaks. Labor, as thus accomplished, is more deserving of the term in the human female than in animals; and this is partly owing to the size of the fœtal head, and partly to the circumstance, that in the animal, the axis of the pelvis is the same as that of the body, whilst the axis of the brim forms a considerable angle with that of the outlet. In rare cases, the child is extruded or pushed out without labor-pains. I was called in the night to a female, who declared that she was awakened by a slight abdominal uneasiness, when she found both the child and the secundines expelled; and other cases of a like kind are on record. These facts should be borne in mind in cases of alleged infanticide.

Duration of labor.

The duration of labor varies according to numerous circumstances. There is reason to believe that it is more tedious in civilized than in savage life, and in colder than in warmer climates. The position of the child — with the face behind and the occiput before — constitutes the usual presentation

in natural labor. Of twelve thousand six hundred and thirty-three children, born at the *Hospice de la Maternite* of Paris, twelve thousand one hundred and twenty were of this presentation; sixty-three had the face turned forward; one hundred and ninety-eight were breech presentations; in one hundred and forty-seven, the feet presented; and in three, the knees. All these, however, are cases in which labor can be effected without assistance; the knee and feet presentations being identical — as regards the process of delivery — with that of the breech. But, whenever any other part of the fœtus presents, the position is unfavorable, and requires that the hand should be introduced into the uterus, with the view of bringing down the feet, and converting the case into a foot presentation. It is found that the period of twenty-four hours has some influence upon the process of child-birth, — about five children being born during the night, for four during the day. The parturient and child-bed condition is not devoid of danger to the female; yet the mortality is less than is generally imagined. Fatal cases occur more frequently in male than in female births, owing to the larger size of the male infant. Some years are more fatal than others. In 1839, child-birth was fatal to two thousand nine hundred and fifteen women throughout England and Wales. In 1838, there were only three hundred and seventy-two fatal cases.

Natural labor.

Unnatural labor.

Time of birth.

When the child has been separated from the mother, and continues to live by the exercise of its own vital powers, it has still to be dependent upon her for nutriment adapted to its tender condition. Whilst in the womb, this nutriment consists of fluids placed in contact with it; but after birth, a

Lactation.

secretion serves the purpose, which has to be received into the stomach and undergo the digestive process. This secretion is *milk*. It is prepared by the *mammæ*, or *breasts;* the number, size, and situation of which are characteristic of the human species. Instances are on record of three or more distinct breasts in the same individual. At times, there are two nipples on one breast. In some cases, there are supernumerary breasts on other parts of the body. Each breast contains a mammary gland, surrounded by the fat of the breast, and resting on what is termed, in technical language, the pectoralis major muscle, or larger breast-muscle. It is formed of several lobes, united by somewhat dense areolar tissue, and consisting of smaller lobules, which seem again composed of round granulations, of a rosy-white color, and about the size of a poppy-seed. These granules cannot be distinguished in the breasts of the virgin. There are excretory ducts, called milk-bearers, which are crooked, capable of extension, and transparent. They enlarge, and unite with each other; so that those of each lobe remain distinct from, and have no communication with, the ducts of any other lobe. All these finally terminate in sinuses, or reservoirs, near the base of the nipple, which are fifteen or eighteen in number, and open on the nipple, without having any communication with each other. In the middle of the breast is the tubercle, called *nipple*, *mammella*, or *teat*, — a prominence, consisting of an erectile, spongy tissue, differing in color from the rest of the breast. The nipples do not project directly forward, but forwards and outwards, for wise purposes, which have been thus depicted by Sir Astley Cooper: — "The natural obliquity of the nipple forwards and

outwards, with a slight turn of the nipple upwards, is one of the most beautiful provisions in nature, both for the mother and her child. To the mother, because the child rests upon her arm and lap, in the most convenient position for sucking; for, if the nipple and breast had projected directly forwards, the child must have been supported before her in the mother's hands, in a most inconvenient and fatiguing position, instead of its reclining on her side and arm. But it is wisely provided by nature, that when the child reposes upon its mother's arm, it has its mouth directly applied to the nipple, which is turned outwards to receive it; whilst the lower part of the breast forms a cushion upon which the cheek of the infant tranquilly reposes." The skin at the base of the nipple is rough, and secretes a fluid for the lubrication of the part, and for defending it from the action of the secretions from the mouth of the infant during lactation.

The secretion of milk is liable to longer intermissions than any other function of the kind. In the unmarried and chaste female, although the blood whence milk is formed may be constantly passing to the breast, no secretion takes place from it. It is only during pregnancy, and some time afterwards, that, as a general rule, the necessary excitation exists to produce it. Yet, although largely dependent on the generative function, — the breasts undergoing their chief development at puberty, and becoming shrunk and withered in old age, — the secretion may arise independently of pregnancy; for it has been witnessed in the unquestioned virgin, the superannuated female, and even in the male sex.

There is an intimate and mysterious sympathy

between the breasts and the womb. Humboldt adduces the case of a man, thirty-two years of age, who nursed his child for five months on the secretion from his breasts; and there are several such cases recorded in the books. Milk is composed of water, casein, sugar of milk, and certain salts. Human milk has more sugar of milk, and less cheesy matter, than that of the cow; hence it is sweeter, more liquid, less coagulable, and incapable of being made into cheese. The quantity and character of the milk differ according to the character and quantity of the food. The milk is more abundant, thicker, and less acid, if the female lives on animal food; and possesses the opposite qualities, when vegetable diet is used. The milk and butter of cows indicate unequivocally the character of their pasturage, especially if they have fed on turnip, wild onion, etc. Medicine given to the mother may in this way act upon the infant. Serious — almost fatal — narcotism was induced in the infant of a professional friend of the writer, by a dose of morphia administered to his wife. The secretion of milk usually continues until the period when the teeth of the infant have acquired the necessary development for the mastication of ordinary food; and it generally ceases during the second year.

For a great part, or the whole of this time, the monthly turns are suspended; and if both the menses and lactation go on together, the flow of milk is small in quantity and poor in quality. Whilst the secretion of milk continues, the female is less likely to conceive; hence the importance — were that not even more weighty reasons — of the mother suckling her own child, in order to prevent the too rapid succession of children. In a certain

number of recorded cases, fifty-six per cent became pregnant whilst suckling. When the menses flow during suckling, it is an evidence that the womb has again the organic activity which befits it for impregnation.

CHAPTER VIII.

EMBRYOLOGY.

The human ovum does not generally reach the womb until about ten or twelve days after conception, or after its discharge from the ovary. On the seventh or eighth day after conception, the future situations of the brain and spinal marrow are said to be recognizable by powerful instruments. On the thirteenth or fourteenth day, it is perceptible in the uterus, and of about the size of a pea, containing a turbid fluid, in the midst of which a dark point is suspended. Good descriptions of the human ovum, a child in the egg-state, within the first month of conception, are very rare; and many of the accounts appertain to diseased ova, or to monstrous or distorted embryos, thrown off by abortion. Its weight at this period has been estimated at about a grain; length, one-twelfth of an inch. On the twenty-first day, the embryo appears under the shape of a large ant, according to Aristotle; of a grain of lettuce, a grain of barley, according to Burton. At this period, its different parts have a little more consistence; and those that have afterwards to form bone assume the cartilaginous condition. On the thirtieth day, some feeble signs of the principal organs, and of the situation of the upper limbs, are visible; — length, four or five lines. About the fortieth day, the shape of the child is

The child in the egg state.

determinate; and it now, in the language of some physiologists, ceases to be embryo, and becomes fœtus. According to others, it is not entitled to the latter name until after the beginning of the fourth month. The limbs resemble tubercles, or the shoots of vegetables; the body lengthens, but preserves its oval shape, — the head bearing a considerable proportion to the rest of the body. The base of the trunk is pointed and elongated. Blackish points or lines indicate the presence of the mouth, nose, and eyes; and similar parallel points correspond to the situation of the vertebræ. Length, ten lines. In the second month, most of the parts exist. The black points, which represented the eyes, enlarge in every dimension; the eyelids are sketched, and are extremely transparent; the nose begins to stand out; the mouth increases and becomes open; the brain is soft and pulpy; and the heart is largely developed. Prior to this period, very early, indeed, substances or bodies are perceptible, which were first described as existing in the fowl. According to Muller, they disappear in man very early; so that but slight remains of them are perceptible after the ninth or tenth week of pregnancy. They cover the region of the kidneys, and are presumed to be organs of urinary secretion during the first periods of fœtal existence. The fingers and toes are now distinct. In the third month, the eyelids are more developed, and firmly closed. A small hole is perceptible in the position of the ear. The wings of the nose, as they are called, are distinguishable. The lips are very distinct and approximate, so that the mouth is closed. The organs of generation of both sexes undergo an extraordinary increase during this month. The

Second month.

Third month.

penis is long; the scrotum empty, frequently containing a little water. The vulva is apparent, and the clitoris prominent. The brain, though still pulpy, is considerably developed, as well as the spinal marrow. The heart beats forcibly. The lungs are insignificant; the liver very large, but soft and pulpy, and appears to secrete scarcely any bile. The upper and lower limbs are developed. Weight, two-and-a-half ounces; length, three-and-a-half inches.

Fourth month.

During the fourth month, all the parts acquire great development and character, except, perhaps, the head and liver, which increase less in proportion than other parts. The brain and spinal marrow acquire greater consistence; the muscular system, which began to be observable in the preceding month, is now distinct; and slight almost imperceptible movements begin to manifest themselves. The length of the fœtus is, at the end of one hundred and twenty days, five or six inches; the weight, four or five ounces.

Fifth month.

During the fifth month, the development of every part goes on; but a distinction is manifest amongst them. The muscular system is well marked, and the movements of the fœtus unequivocal. The head is still very large, compared with the rest of the body, and is covered with small silvery hairs. The eyelids are glued together. Length, seven to nine inches; weight, six or eight ounces. If the fœtus be born at the end of five months, it may live for a few minutes.

Sixth month.

In the sixth month, the derma begins to be distinguished from the epidermis. The skin is delicate, smooth, and of a purple color; especially on the face, lips, ears, palms of the hands, and soles of the feet. It seems plaited, owing to the absence of fat in the subcutaneous, areolar tissue. The

scrotum is small, and of a vivid red hue. The vulva is prominent, and its lips are separated by the projection of the clitoris. The nails appear, and towards the end of the month are somewhat solid. Should the fœtus be born now, it is sufficiently developed to breath and cry; but it generally dies in a short time. Length, at six months, ten or twelve inches; weight, under two pounds. During the seventh month, all the parts are better proportioned. The head is directed towards the mouth of the womb, and can be felt by the finger passing into the vagina; but it is still very movable. The eyelids begin to separate, and the membrane, which previously closed the pupil, begins to disappear. The fat is more abundant, so that the form is rounder. The skin is redder. Its sebaceous follicles, which secrete a white, cheesy substance, that covers it, are formed; and the testicles are in progress to the scrotum. The length, at seven months, is fourteen inches; weight, under three pounds. In the eighth month, the fœtus increases proportionally more in breadth than in length. All its parts are firmer and more formed. The nails exist; and the child is now certainly *viable*, or capable of supporting an independent existence. The testicles descend into the scrotum; the bones of the skull, ribs, and limbs are more or less completely vasified. Length, sixteen inches; weight, four pounds, and upwards. At the full period of nine months, the organs have acquired the development necessary for the continued existence of the infant. Length, eighteen or twenty inches; weight six or seven pounds.

Seventh month.

Eighth month.

The full period.

Dr. Dewees says the result of his experience in this country makes the average weight about seven pounds. He has met with two ascertained cases of

fifteen pounds, and many that he believed to be of equal weight. When there are twins, the weight of each is usually less than in a uniparous case; but their united weight is greater. The estimates above give no more than an approximation to the general truth. The facts will be found to vary in individual cases. The difficulty must necessarily be great in making any accurate estimate during the early periods of fœtal existence; and the changes in the after months are liable to considerable fluctuations.

Position of fœtus in utero.

The position of the fœtus in the womb, and the cause of such position at various periods of pregnancy, have been topics of some interest. In the early weeks, it seems to be merely suspended by the cord; and it has been conceived, that owing to the weight of the head, it is the lowest part. It is difficult, however, to admit this as the cause of the position in such an immense majority of cases, or to fancy that the nice adaptation of the fœtal position to the parts through which the child has to pass, is simply dependent upon such a mechanical cause. Gravity can afford us no explanation of the fact, that the face, in twelve thousand one hundred and twenty cases, of twelve thousand five hundred and thirty-three, was behind and the occiput in front. Dr. Simpson affirms that the usual position of the fœtus, with the head lowest, is not assumed until about the sixth month of intra-uterine life, or life in the womb.

Position at full period.

At the full period, the body is bent forward, the chin resting on the chest; the occiput towards the brim of the pelvis; the arms folded in front, and one or both lying upon the face; the thighs bent upon the belly; the knees separated; the legs crossed and drawn up, and the feet bent upon the anterior surface of the legs; so that the

oval, which it thus forms, has been estimated at about ten inches in the long diameter, — the head, at the full period, resting on the neck, and even on the mouth of the womb, and the breech corresponding to the fundus of the organ.

What are called the fœtal dependencies, consist, first, of two membranes ;— the outermost, called the *chorion ;* the innermost, filled with a fluid, in which the fœtal child swims, and called *amnion*, or *amnios*. Then there is a spongy, vascular body, situate without the chorion, covering about one-quarter of the ovule, and connecting it with the womb. This is called the *placenta*. Then there is a cord of vessels called the *umbilical cord*, or *navel-string*. It extends from the placenta to the fœtus. This cord, in fact, connects the unborn child with its mother. The amnion contains a serous fluid, the quantity of which is in an inverse ratio to the size of the new being ; so that its weight may be several drachms, when that of the fœtus is only a few grains. At first, the *liquor amnii*, for so it is called, is transparent; but, at the full period, it has a milky appearance. It has a saltish taste, a spermatic smell, and is sticky and glutinous to the touch. The quantity of this liquor varies in different individuals, and in different pregnancies, from four fluid ounces to as many pints. Occasionally, it is found in such quantities, as to give the impression of dropsy rather than pregnancy. The abdomen of a lady had been for some time enlarging with what was supposed to be the dropsy. But as she complained of intermittent pains, an examination *per vaginam* was deemed prudent. The mouth of the womb was found to be dilating. In fact, in a few days, she was delivered of a healthy child, the

Liquor amnii.

gush of *liquor amnii* being enormous. Suffice it to say, that the *dropsy* at once disappeared.

The placenta.

The *placenta* is not in existence during the early period of pregnancy; but its rudimental formation commences, perhaps, with the arrival of the fœtus in the womb. The following are the chief anatomical constituents of the placenta as usually described by anatomists: — First, Blood-vessels, from two sources, — the mother and child. The former proceed from the womb, and consist of arteries and veins; the arteries of small size, but of considerable number. The vessels which proceed from the child are those contained in the umbilical cord — the umbilical vein and arteries.

The fœtal head, lungs, etc.

The head of the fœtus is large in proportion to the rest of the body. The lungs not having received air in respiration, are collapsed and dense, of a dark color, like the liver, and do not fill the cavity of the chest. The heart is proportionably larger and more conical than in the adult. The bowels, at the full period, always contain a quantity of greenish or deep-black matter,

The fœtal fæces.

or fæces, to which the term *meconium* has been applied, owing to their resemblance to the juice of the poppy. The liver is very large, so much so, as to occupy both hypochondriac regions; and the right and left lobes are more nearly of a size than in the adult. The urinary bladder is of an elongated shape, and extends almost to the navel. Not

Sex.

till the fourteenth week is the sex distinct. Some physiologists assert that the sexes are originally neuter, and that the future sex is determined by accidental circumstances during the first week of fœtal life. Others maintain that the female sex is the male, arrested at an inferior point of organization, the clitoris of the female being transmuted into

a penis, and every embryo being originally female.

The external senses.

This is a mere fancy. The external senses in general are manifestly not in exercise in the womb. Of course, there can be no use of the sense of sight; and the same remark applies to the senses of taste, smell, and hearing.

These senses in the fœtal child show that it is not intended to remain permanently in its uterine cave, but it is to be an inhabitant of the outer world of light, odor, and sound. In regard to the sense of touch, or feeling, there is good reason to believe that the brain and nervous system of the fœtal child receive impressions made through the medium o the mother. We have strong reason for believing that pain may be experienced by the child in the womb; for, if it be destroyed by any sudden influence during the later periods of pregnancy, death is generally preceded by irregular movements, manifest to the mother, and frequently leading her to anticipate the result. The power of motion, voluntary as well as involuntary, exists after the fifth month, and probably much earlier, could it be appreciated.

Power of voluntary motion.

During the latter months of pregnancy, the motion appears to be almost incessant, and can be distinctly felt by placing the hand upon the belly. At times, indeed, it is manifest to sight. The cause of these movements is by no means clear. It is probable, that they are for the purpose of changing the positions, which may have become tiresome; for I have already remarked, that the fœtal child readily feels any impulse given to it through the mother, and hence it possesses the sense of feeling; and, as we can readily understand, may experience fatigue from the maintenance of an inconvenient posture, and send nervous influ-

ence to the appropriate muscles to change it. There are cases on record, where children are said to have cried in the womb, so as to have been distinctly heard, not only by the mother, but by those around her.

Nutrition of child in the womb.

The functions of nutrition are not as numerous in the fœtal child as in the adult. Their object is, however, the same, — the formation of the various parts of the organized machine, and the constant decomposition and renovation. One of the least probable theories that have been entertained regarding the embryo at its first formation, is, that for the first month, its vitality is not independent, but is a part of that of the mother; that it has no separate powers of existence; no faculty of independent growth; and that its organs are nourished by the plastic materials which it constantly derives from the maternal blood. The ovum, after it has been fertilized by the seed of the male, does not reach the womb before ten or twelve days. Some time must still elapse before it becomes attached to the womb, and before, consequently, anything like maternal blood could be supplied to it. What supports its vitality during this period? Physiologists, writers on midwifery, and lecturers, are silent on this important stage of embryonic life. Since the time of Hippocrates, Aristotle, and Galen, different anatomists and physiologists have asserted that the umbilical vein is the only channel through which nourishment reaches the fœtal child; in other words, that the whole of the nourishment which it receives is from the placenta. A live child has been born without any umbilicus. It died in about ten minutes. On the other hand, it is asserted that there is no authentic instance

of a fœtus, devoid of umbilical cord and placenta, attaining full uterine growth. What are called marsupial animals, that is, animals with a pouch, such as the kangaroo, breed their young without navel-string or placenta. The embryos are inclosed in one or more membranes, which are not attached to the coats of the womb, and are supplied with nourishment from a gelatinous matter by which they are surrounded. The *liquor amnii*, in which the fœtal child floats, may have more agency in the nourishment of the new being than is generally granted. The placenta is sometimes a hard, gritty, calcareous cake, rendering any circulation between the mother and child impracticable. That the *liquor amnii* is possessed of nutritive properties, is shown, not only by its containing albumen, but by the fact that new-born calves have been nourished for a fortnight on fresh *liquor amnii*. Physiologists, who believe that the *liquor amnii* is received into the stomach, differ as to what happens to it in that organ. Some suppose that it is simply absorbed, without undergoing digestion; others, that it must be first subjected to that process. According to the former opinion, it is simply necessary that the fluid should come in contact with the mucous membrane of the alimentary passages; and they affirm, that if digestion occurs at all, it can only be during the latter months. Others, however, conceive that the waters are swallowed, or sucked in, and undergo true digestion. But I have no space to go at length into the *pros* and *cons* of speculative opinions on this moot physiological question. The better opinion seems to be, in my judgment, that the placenta and navel-string are not indispensable to the nourishment

of the fœtal child. In order for the child to grow and be developed in the womb, it is only necessary that there shall be an absorbing surface, surrounded by a nourishing substance that can be absorbed. The cutaneous envelope of the child is such a surface, and the *liquor amnii* such a fluid. It both floats the child unharmed in the womb, and nourishes it. However the child in the womb is nourished, certain it is that it grows rapidly.

Monstrosities.

Owing to unappreciable causes, the different parts of the fœtal child, or some particular part, may be preternaturally developed, or be defective, so as to give rise to what are termed *monstrosities*. Three kinds of monsters may be considered to exist. The first comprises such as are born with an excess of parts, as with two heads to one trunk; two trunks to one head; with four arms and four legs; twins, with a band uniting them, as in the case of the Siamese twins, etc. The second includes those in which a part or parts are wanting, as the head, or eyes; and the third is where there is a transposition of the visceral organs, as where the heart is on the right side, the liver on the left, etc. The German physiologists include these three kinds of monstrosities under the head of *excessive*, *defective*, and *perverted* action of the formative or plastic force.

These monstrous formations have been attributed, first, to the influence of the imagination of the mother on the child in the womb; second, to accidental changes experienced by it at some period of its existence in the womb; and, thirdly, to some original defect or fusion of the germs. We know that any violent emotion of the mother may destroy the child. Small-pox, measles, and other

Contagious diseases.

contagious diseases can be unquestionably communicated to the child in the womb; so that its life is indirectly, but largely, dependent upon the condition of the mother; and many striking examples of the influence of the mother on the constitution of her unborn babe are given by Dr. Combe.

But it has been asserted that the mother's excited imagination may occasion an alteration of particular parts of the unborn child, so as to give rise to all kinds of *mother's marks*, as they have been termed. These may consist of spots resembling raspberries, grapes, etc. Cases have occurred in which the mother, when a few months advanced in pregnancy, had been shocked by the sight of a person who had lost a hand, and the child has been born *minus* a hand. A young female, a few months gone with child, visited a brother in a hospital, who was wounded in the side. His condition affected her extremely. Her child was born with a deep pit in the same part that was wounded in the brother. These are samples of thousands of recorded cases. Similar cases occur among the lower animals. It is a fact, that the circulation of the child in the womb is totally distinct from that of the mother, who can only influence it through the nourishment which she furnishes. How, then, can her excited feelings cause defects and deformities in her unborn child? How can she have power to arrest and extinguish the growth of an arm, for instance, that must have already been formed? Cases of harelip are continually occurring, yet they are never attributed to the influence of the mother. Monstrous formations and growths are continually occurring, not only in human beings, but in the lower animals and plants. Monstrosi-

Mother's marks.

Influence of mother's imagination.

ties can be classified. They occur independently of any maternal influence. Independently of all disturbing influences from the mother, the child in the womb is known to be frequently attacked with spontaneous diseases, such as dropsy, ulceration, gangrene, eruptions of the skin, etc. Some of these diseases are fatal before birth. At other times, it is born with them, and they are then called *congenital*, or *connate* malformations; such as club-foot, harelip, six fingers, hydrocephalus, closed anus, eyelessness, plurality of fingers and toes, etc. The proportion of deaf and dumb amongst the whites in this country has been found to be one in two thousand one hundred and twenty-three; amongst the colored, one in two thousand nine hundred and thirty-three. Where a part has been found wanting, the nerve, or blood-vessel, or both, proceeding to it have likewise been found wanting; so that the want of the organ has been thus explained, without our being able to account for the deficiency of such nerve, or blood-vessel, which is the main point. The temperature of the child in the womb is some degrees lower than that of the mother. It possesses the power of producing its own caloric, or animal heat, as well as the adult, whether its temperature be higher or lower. The secretion of urine is supposed to be active from the earliest period of the existence of the child in the womb, because the kidneys exist at a very early period, and the bladder at the full time contains urine.

Diseases of child in womb.

Congenital excesses and defects.

Temperature of fœtus.

Secretions.

CHAPTER IX.

INFANCY.

Lo, at the couch, where infant beauty sleeps,
Her silent watch the mournful mother keeps.
She, while the lovely babe unconscious lies,
Smiles on her slumbering child with pensive eyes,
And weaves a song of melancholy joy;
Sleep, image of thy father, sleep, my boy;
No lingering hours of sorrow shall be thine,
No sigh that rends thy father's heart and mine.
Bright as his manly sire, the son shall be,
In form and soul; but, ah, more blest than he.
Thy fame, thy worth, thy filial love shall last,
Shall sooth my aching love for all the past.
With many a smile my solitude repay,
And chase the world's ungenerous scorn away.

CAMPBELL.

The period of infancy.

The age of infancy extends from birth to the second teething, or until about the seventh or eighth year. It is sometimes divided into three periods. The one comprises the period between birth and the first teething, or dentition, — generally about seven months; a second embraces the whole period of the first teething, or up to about two years; and the third includes the interval that separates the first from the second teething. As soon as the child is ushered into the world, it assumes an independent existence, and a series of changes occurs in its functions, of the most sudden and surprising character. Respiration becomes

Changes after birth

established, after the manner in which it is to be affected during the remainder of life; and the whole of the peculiarities of fœtal circulation cease. The first act after the child is born is to breathe, and at the same time to cry. What are the agencies, then, by which the first inspiration is effected, and the disagreeable impression which causes the newly-born babe to cry made? This has been an interesting topic of inquiry among physiologists. The external air, by its coldness and weight, must cause a disagreeable impression on the skin of the infant, as well as on the origin of all the mucous membranes; and, perhaps, the organs of the senses, being at the same time suddenly subjected to the contact of their proper irritants, receive painful impressions from them. These different impressions being transmitted to the brain, are reflected to the different dependencies of the nervous system, and, consequently, to the nerve of the muscles of breathing, or the inspiratory muscles; these muscles, thus excited, enter into contraction, in the same manner as the heart is stimulated to renew its contractions during syncope, when a stimulating vapor is inspired. The first act of breathing seems to be purely mechanical, and to result from the change of position which the child undergoes at birth. The lungs are liberated from the pressure to which they were subjected in the womb; the vital air rushes into them, and sets them in motion. The atmosphere is, as it were, the soil in which the lungs are rooted and developed. The blood of the infant, thus exposed to the air in the lungs, becomes arterialized; and from this moment, the distinction between arterial and venous blood is established. The circulation through the vessels peculiar to the

fœtal condition now ceases, even without any ligature being placed upon the umbilical cord.

Respiration.

Breathing, or respiration, depends partly upon the will, and is partly involuntary. When the appetite for air becomes irresistible, the muscles concerned in the mechanical operations of breathing are immediately thrown into action. The sudden and important changes occurring in this manner guide us to the decision of an interesting medico-legal inquiry — whether, in a case of alleged infanticide, the child has breathed or not; in other words, whether it was born alive or dead? After respiration has been established, the lungs, from being dark-colored and dense, become of a florid-red hue; are light and spongy, and float on water. Respiration, or breathing, having once been thoroughly established, the babe enters upon the first period of infancy, which has now to engage attention. The animal functions during this period undergo considerable development. The sense of touch is slight, but it exists, as the child appears very sensible to external cold. At first, touch is not exerted under the influence of the will; but towards the termination of the period, it begins to be active. Taste can hardly be said to exist at first. Some think it is probably exerted on the first day, as regards the fluids which the infant sucks and drinks. We have daily evidence, however, that at an early period of existence, the most nauseous substances, provided they are not irritating, are swallowed indiscriminately and without the slightest repugnance; but, before the end of the period under consideration, the sense of taste becomes very acute, so that the babe is made to take nauseous substances, such as medi-

Gradual development of sexes.

cine, with difficulty. Smell is probably more backward than any other of the senses, the development of its organ being more tardy, the nose small, and the nasal sinuses not in existence. In the first few weeks, sight and hearing are imperfectly exerted, but soon after, they are in full activity. The internal feelings, being instinctive, exist; all those, at least, that are connected with the animal and nutritive functions. Hunger and thirst appear during the first day of existence; the desire of passing the urine and fæces is doubtless present, notwithstanding they appear to be discharged involuntarily; and the morbid sensation of pain is often experienced, especially in the intestinal canal, owing to wind, sourness, etc.

Natural appetites and desires.

During the first part of the period, the child exhibits no mental and moral manifestations; but in the course of a few weeks, it begins to notice surrounding objects, especially such as are brilliant, and to distinguish between the faces to which it has been accustomed, and those of strangers, — awarding a smile of recognition or of satisfaction to the former, a look of gravity and doubt to the latter. Locomotion, as well as an erect attitude, are at this period utterly impracticable. The muscular system is not yet sufficiently developed. The babe has not yet learned to keep the centre of gravity. Squalling is the only mode of expressing its feelings which the babe has at this period. This indicates uneasiness of some kind; but, before the end of the period, the infant begins to smile, and even laugh, as well as squall, and tries to utter sounds, which cannot yet be considered as any effort at conventional speech. Sleep is largely indulged. Soon after birth, it is almost

The squalling period.

constant, except when the child is taking nourishment. Gradually, the waking intervals are prolonged; but throughout much sleep is needed, owing to the frail condition of the nervous system, which is soon exhausted by even feeble exertion, and requires intermission of activity.

After birth, the child has to subsist upon a different kind of nourishment from that with which it was supplied while in the womb. Its digestion, therefore, undergoes a change. The nourishment is now the milk of the mother, or some analagous liquid, which is sucked in. For this mode of taking nourishment, the mouth is well adapted. The tongue is large, compared with the size of the body; and the want of teeth enables the lips to extend forward, and seize the nipple more conveniently. Sucking is doubtless as instinctive as the appetite for nourishment, and equally incapable of explanation. The appetite appears to be almost incessant, partly owing to the rapidity of growth, which demands constant supplies of nutriment; and partly, perhaps, to a feeling of pleasure experienced in the act, which is generally followed by sleep, broken in upon apparently for the mere purpose of supplying the wants of the system, or the artificial desire produced by frequent indulgence. Often, we have the strongest reason for believing, that the great frequency of the calls of appetite is occasioned by the habit, with many mothers, of putting the child constantly to the breast. Digestion, at this age, is speedily accomplished; — the evacuations being frequent, two or three, or more, in the course of the day, and having by no means the offensive smell which they afterwards possess. During the first days after birth,

Mother's milk.

they are dark and adhesive. Young mothers are apt to be alarmed at this appearance, which is entirely healthy, and always exists to a greater or less degree. Breathing is more frequent than in the adult, nearly in the proportion of two to one. The circulation is more rapid, — the pulsations, at birth, being twice as numerous as in the adult. Animal heat becomes gradually more and more marked from the time of birth.

Second period of infancy.

The second period of infancy embraces the whole time of teething, and is considered to include the age between seven months and two years. In it, the senses are continually conveying information; perception is therefore most active, as well as memory; but imagination and judgment are feeble and limited. The faculty of imitation is strong; so that, by hearing spoken language, the child endeavors to imitate it with its own larynx, and gradually succeeds. It is surprising how soon it may be made to understand the wishes of those having the care of it, and how easily it may be moulded at this tender age, in almost any manner that may be desired. Locomotion, at first, is accomplished by creeping on all-fours; a position assumed much more easily than the biped attitude, owing to the centre of gravity between situated low. In this attitude, it moves about for some time, or locomotion is effected by pushing a chair before it. Gradually it passes from place to place on its feet, by holding on to surrounding objects, until, finally, it succeeds in standing erect and walking alone. When once fairly on its legs, the whole of the waking hours is spent in incessant activity and amusement. But it still requires much sleep.

Locomotion.

One of the most important changes going on at

this age concerns the function of digestion. This is the process of teething, or *dentition*, which usually commences about the seventh month, and continues till the end of the second year, at least. Prior to the appearance of the teeth, mastication is of course impracticable; and the food best adapted for the delicate powers of the infant is that afforded by the breast of the mother, or a substitute which resembles it as nearly as possible. The appearance of teeth would seem to indicate that the infant is about to be able to eat, or take more solid aliment. At about the sixth month of its life in the womb, a depression, a groove, of horseshoe shape, is seen along the edge of the jaw, in the mucous membrane of the gum, which is called the primitive dental groove; and in the same month of pregnancy, if the jaws of the fœtal child be carefully examined, the germs of teeth are perceptible in their substance in a pulpy state. About the end of the third month, these germs begin to harden into bone, and a little sooner in the lower jaw than in the upper. The age at which the teeth make their appearance varies. Occasionally, children have been born with teeth; whilst in other cases, they have not pierced the gum until after the period I am considering. Generally, the middle incisors of the lower jaw appear about the seventh month, and later those of the upper; next, the upper and lower lateral incisors in succession; then, the first lower molars, or grinders, and first upper molars; next, the upper and lower canine teeth successively; and lastly, the second grinders of each jaw. As a general rule, the teeth of the lower jaw precede those of the upper. When the tooth passes through

Teething.

the dental capsule, the child is said to have "cut a tooth." The first teeth are called the milk-teeth. Teething is necessarily a physiological process, but it is apt to be a cause of numerous diseases. The whole period of its continuance is one of great nervous susceptibility, so that the surgeon never operates during it, unless when compelled; and we can understand, that the pressure exerted by the tooth on the gum, and the consequent inflammation and irritation, may lay the foundation for numerous diseases. Whilst the teeth are appearing, the muscular structure of the body is acquiring strength. The food of the child is now diversified, and it begins to participate in the ordinary diet of the table.

Great mortality in infancy.

The number of deaths during this period is great. The deaths under two years of age, in some large cities, are nearly thirty per cent of the whole number. In some healthier towns, the proportion is less than a third. The cholera of infants is the great scourge of our cities during the summer months, whilst in rural regions it is comparatively rare; and it is always found to prevail most in crowded alleys, and in the filthiest and impurest habitations. There is something in the confined and deteriorated atmosphere of a town which seems to act in a manner directly unfavorable to human life, and to the life of the young especially; and this applies also to animals. During the third period of infancy, the growth of the child goes on as in the preceding period, but gradually acquires more and more energy. Within this period a third molar tooth appears, which is not, however, temporary, but belongs to the permanent set. During the whole of infancy, the skin and mucous membranes

Cities deleterious to the young.

are extremely liable to be morbidly affected; hence the frequency of eruptive diseases, and of diarrhœa, croup, bronchitis, etc., many of which are of a very fatal tendency. Owing also to the susceptibility of the nervous system, convulsions, hydrocephalus, and other affections of the head, are by no means unfrequent.

CHAPTER X.

ABORTION.

Importance of subject.

I write this chapter with a full sense of the momentous importance of the subject discussed. Indeed, its importance cannot be exaggerated; for the crime of induced abortion, whose frequency, especially in our own land, has attracted the attention, not only of the medical associations of the country, but of the pulpit and the press, and the statistician, the political economist, and the professors of social science. The crime of induced abortion, I say, strikes at the very roots of the family, which is the foundation of the state or nation. It nullifies the purposes of nature and the Deity, in the creation and peculiar organization of woman, whose final cause may be said to be the continuance of the species. God blessed the male and female both of the human species in Eden; and his primal command to them was, "Be fruitful, and multiply; and replenish the earth, and subdue it." A sarcastic English writer, who has recently been writing a series of caustic, and, I had almost said, ill-natured, articles on the higher classes of his own country-women, says, under the head of "Modern Mothers," "No human affection has been so passionately praised as maternal love, and none is supposed to be so holy or so strong. Even the poetic aspect of the instinct which inspires the young with their

Induced abortion nullifies the purposes of Deity.

The maternal instinct.

dearest dreams, does not rank so high as this; and neither lovers' love nor conjugal love, neither filial affection nor fraternal, comes near the sanctity and grandeur of the maternal instinct. But all women are not equally rich in this great gift; and, to judge by appearances, English women are at this moment particularly poor, that is, the higher orders. It may seem a harsh thing to say, but it is none the less true, *society has put maternity out of fashion;* and the nursery is, nine times out of ten, a place of punishment, not of pleasure, to the modern mother. Two points connected with this subject are of growing importance at the present time: The one is, the increasing disinclination of married women to be mothers at all; the other, the large number of those who, being mothers, will not, or cannot, nurse their own children. In the mad race after pleasure and excitement now going on all through English, and, let me add, American society, the tender duties of motherhood have become simply disagreeable restraints; and the old feeling of the blessing attending the quiver full is exchanged for one expressive of the very reverse. With some of the more intellectual and less instructive sort, maternity is looked on as a kind of degradation; and women of this stamp, sensible enough in everything else, talk impatiently among themselves of the base necessities laid on them by men and nature, and how hateful to them is everything connected with their characteristic duties. This wild revolt against nature, and especially this abhorrence of maternity, is carried to a still greater extent by American women, with grave national consequences resulting."

Maternity unfashionable.

Duties of motherhood disagreeable restraints.

Abhorrence of maternity among American women.

I wish I could controvert this assertion of the foreign writer, and stigmatize it as a foul aspersion

upon my fair countrywomen; but, with the facts of my medical experience staring me in the face, I cannot. The writer, from whom I am quoting, goes on to say: — "But though we have not yet reached the Transatlantic limit, the state of the feminine feeling and physical condition among ourselves will disastrously affect the future, unless something can be done to bring our women back to a healthier tone of mind and body. No one can object to women declining marriage altogether, in favor of a voluntary self-devotion to some project or idea; but, when married, it is a monstrous doctrine to hold that they are in any way degraded by the consequences, and that natural functions are less honorable than social excitements. The world can get on without balls and morning calls, but not without wives and mothers. And those times in a nation's history when women have been social ornaments rather than family homestays have ever been times of national decline, and of moral failure."

These words of a writer, not apparently over friendly to the sex, state nothing more than the truth. To thwart the very end and aim of existence, as manifested by the female organization, is a crime which cannot be perpetrated with impunity by any of the parties concerned. The delicacy of the subject is exceeded by its importance to the welfare, not only of the living, but of unborn generations. Therefore, I shall discuss it thoroughly, without any reservation or circumlocution. And first, let me notice two singular remarks of a great living English philosopher, on the subject of progeny and intersexual love. I refer to John Stuart Mill.

In the first place, he takes the ground of Malthus, that a married pair, not only have a right, but are

under solemn obligations, not to multiply and increase beyond their ability to support properly and launch into life under favorable circumstances the fruit of their loins. To go on multiplying mouths, and rearing innocent children to be the sons and daughters of want and misfortune, to be life-long subjects of privation and suffering, Mr. Mill holds to be a great sin as well as folly. Certainly, his doctrine is not without plausibility in old, crowded countries like England, where actual starvation or death by inanition is not an uncommon incident. Except in our crowded cities, thank God, and in the lowest and most vicious purlieus of our cities, such an incident can hardly occur. Early poverty here is as likely as not to emerge, later in life, into wealth and social influence and respectability. Therefore, the doctrines of Mill and Malthus are hardly applicable to American society.

John Stuart Mill's opinion of progeny and intersexual love.

Mr. Mill goes further, and avers, that the passion of love plays far too important a part in human existence, and that it is a terrible obstacle to human progress. Doubtless, the passion of love is not always prudent and judicious, but the Deity has made it all-conquering and intense to the last degree, in order that he may insure the propagation of the species. The fecundity of the Irish is irrepressible under the most adverse circumstances. But a highly educated population will hardly consent to beget children to be hewers of wood and drawers of water. They will look before they leap, even in the exercise of the sexual passion.

Love an obstacle to human progress.

In China and some other pagan, semi-civilized countries, where population is so dense as to be a drug and man is a mere weed, fœticide and infanticide both are regarded as perfectly justifiable

Fœticide and infanticide in China.

methods of keeping down a redundant increase of human beings. If they were not resorted to, starvation would quickly dispose of the mouths for which no food could be provided. In ancient Sparta, no deformed child was suffered to live. It was suppressed, as it were, immediately after birth. But in Christian lands like our own, such resorts to check population are simply murder, and are regarded as such by public opinion, and are treated as such by criminal statutes. George Francis Train says that New England is paved with infants' skulls; and that the only hope of keeping up population here is intermarriage with German and Irish Catholic women, who do not kill their children, either in embryo by the aid of the abortionist or after birth.

Dr. H. R. Storer's Prize Essay.

I have before me, while I write, a prize essay by Dr. H. R. Storer, Professor of Obstetrics and the Diseases of Women in Berkshire Medical College. It is indeed a book for every woman, every American woman especially. Dr. Storer has made a specialty of the subject of his prize essay, namely, criminal abortion. I shall have occasion frequently, in the course of this chapter, to quote from the essay in question. At page 65, he says, "We should suppose *a priori*, that the Protestant especially, if of New-England and Puritan stock, would be much the safer against all such assaults of the world, the flesh, and the devil." The following is the concise and convincing solution of the paradox that has been given: — "It is not, of course, to imply that

Protestantism.

Protestantism, as such, in any way encourages, or indeed permits, the practice of inducing abortion; its tenets are uncompromisingly hostile to all crime. So great, however, is the popular ignorance regarding this offence, that an abstract morality is here

comparatively powerless; and there can be no doubt that the Romish ordinance, flanked on the one hand by the confessional, and by denouncement and ex-communication on the other, has saved to the world thousands of infant lives."

The confessional saves thousands of infant lives.

Notwithstanding the ease with which subsistence can be obtained in this new and sparsely-settled country, it is undoubtedly true that the disinclination to child-bearing is more common among American women than those of any other country. A generation or two back, American mothers bore as large families and as robust a progeny as English or German or French. But it is a fact, that ill-health prevails to a greater extent among our fair countrywomen than among their sisters of European lands. I offer no explanation of this phenomenon; I simply signalize it. Youth here, and the beauty of early youth, which the French denominate *beaute du diable*, is more evanescent in our young females than it is abroad. A feeling of incompetence to cope with the pains of child-birth, of course, will be a powerful incentive to avoid it altogether, even by questionable means. While such is the feeling among the fair sex, empirics eager for money will be found, of course, who will do what the high-minded physician will never do, except in cases of desperate emergency, where the life of the mother is actually at stake. In general, I reply to all inquiries about evading, by any means whatsoever, the performance of the functions of her sex, that a woman in doing it exposes herself to the most serious consequences, both moral and physical.

American beauty evanescent.

Serious consequences of abortion, moral and physical.

In general, it is true, that for the practice of abortion there never can be offered an excuse that can in reason be considered as weighty. Certainly, no

one will say that a woman *able* to bear a child without danger to life should resort to expelling it from the womb before the natural time of birth; and for those whom, by reason of infirmity or malformation, it is dangerous to have children, there are provided safe protections, whereby the sin of abortion need never to tempt them.

Safe protections.

But I must warn married people that even prevention of pregnancy, by what are thought to be innocuous and justifiable means, is not unfrequently without its bad results to both parties. Even where there is self-control enough on the part of the husband to withdraw from the embrace before it is consummated, and thus prevent conception by voluntarily consenting to forego a part of the venereal pleasure, he not unfrequently finds himself at last made incapable of reproduction by such a practice.

Prevention of pregnancy.

The general definition of abortion in the medical books, is, the expulsion of an embryo or fœtus which is either already dead, or is at a too early period of fœtal existence to live. This definition of abortion will distinguish it from premature labor, which latter is applicable to delivery after the sixth month, when the fœtus may live; and from *false delivery*, which signifies the expulsion of a mole, or false germ, instead of an embryo. I am not now writing about *induced* or *criminal* abortion, but about abortion generally.

Medical definition of abortion.

In regard to the frequency of its occurrence, one authority records, as the result of his own obstetrical experience, sixty-five cases of abortion in one thousand seven hundred and five deliveries; another, two hundred and ninety-three *premature* cases in sixteen thousand four hundred and fourteen deliveries; still another, one hundred and sixteen

Ratio of abortions.

cases of abortion in twenty-one thousand nine hundred and sixty cases of pregnancy, and another, thirty-five in four hundred and twenty. The disposition to abortion is in some females so strong, that the slightest exciting cause will produce it; in other females, the most serious injuries, and the most violent mental and moral impressions, are insufficient to occasion it.

Some of the predisposing causes are referable to the mother, others to the fœtus and its appendages. What are called periodical abortions, or those which occur at the same periods of pregnancy, are produced by too great a rigidity of the womb, which refuses to dilate to accommodate the growth of the fœtus; too great a flow of blood to the uterus and ovaria, and feebleness and relaxation of the neck of womb. If the fœtus dies, of course it acts as a foreign body in the uterus, exciting the womb to expel it. The occasional exciting causes of abortion are extremely numerous. It may even be said that there is scarcely an occurrence in life which may not be occasionally concerned in producing abortion.

Periodical abortions.

Causes of abortion.

The chief causes of this class are, acute diseases; hysterical and epileptic convulsions; syphilis; violent pain; disappointment and anxiety of mind; anger, fright, excessive joy; dancing; riding on horseback, or in an uneasy carriage, or on a rough road; excessive venereal indulgence; severe coughs; hiccup; immoderate laughter; vomitings; sea-sickness; injuries in the loin or abdomen; any sudden shock, even the extraction of a tooth; the use of irritating purgative medicines, or such as have a tendency to promote the monthly flow; pediluvia, or foot-bathing; hot baths; large blood-lettings, par-

ticularly from the feet; and convulsive movements of the quick child in the womb.

Influence of habit.

The influence of *habit* in inducing abortion is a fact familiarly known, if not susceptible of explanation. Each occurrence serves to predispose to a repetition of the accident at about the same period; and, after it has happened several times, it is extremely difficult for the pregnant female to go safely beyond that period. I once had a patient who miscarried thirteen times in succession; and there are cases recorded in the books where this accident has happened as often as twenty-one times. A single patient has been known to miscarry as many as twenty-one times, at or about the same period of gestation, to wit, the third month. Dr. Churchill, in his "Midwifery," states that he has been consulted by a lady who had miscarried ten or twelve times during the second month of gestation; and he observes, that it is remarkable that these patients seem to have as great an aptitude for conceiving as for miscarrying.

Instances of miscarriage.

I have known one instance where the female aborted eighteen times in the course of ten years, at about the fourth month; and at length, the woman died in parturition, the last child having survived to the full time of gestation. It is highly probable, in my judgment, that besides the force of habit in these cases, there is often something to prevent the distension of the uterus beyond a certain size.

Generally, a pregnant woman is more liable to miscarriage or abortion at the period at which the menses would have returned in the unimpregnated state.

The production of abortion, a felonious act.

The production of abortion, of course, is a felonious act, and one which the practitioner never will resort to, except in case of irreducible retroversion of the

uterus, or such a degree of malformation as to render child-bearing simply impossible, and thus oblige the practitioner to have recourse to the cæsarean section, in order to extract the child.

Means of inducing abortion.

The means usually resorted to by females themselves, or by persons who criminally usurp the medical character, and employ feloniously the little medical knowledge they have acquired, either surreptitiously or otherwise, are, large bleeding from the feet; pediluvia; violent emetics; drastic purgatives, particularly those which act upon the colon and rectum; active inciters of the monthly flow, such as savine, ergot of rye, juniper, hellebore, etc.; and stimulating injections into the vagina; also, various mechanical means, employed to break the membranes, or to procure the discharge of the uterine water in which the embryo child floats. Many of the foregoing, or all of them, excepting the last, will often fail of producing the desired effect. They frequently also succeed, and occasion the death of the mother as well as that of the fruit of her womb.

Frequently fail, and frequently fatal to mother.

The uncertainty of the means above detailed has been often shown. Every physician of large practice must have met with numerous cases in which they had been carried to the utmost extent, without acting in the way desired, but had occasioned various internal, inflammatory diseases, which are more dangerous than ordinary child-bed, by far. Many cases are on record, where attempts have been made to produce abortion by puncturing the membranes; and the uterus itself has been penetrated, with fatal consequences to the mother. It is a matter of the utmost difficulty, even to the expert surgeon, to puncture the membranes at that period of pregnancy when it is usually attempted by ignorant

More dangerous than ordinary child-bed.

persons,—the only persons, indeed, who would make the attempt. It is only fools who rush in, where experts fear to tread. In the first two months of pregnancy, the ovum, which is then small, is sometimes expelled without any remarkable pain or hemorrhage; indeed, it often escapes without observation. At this early period, females often suppose that they have been the subject merely of an interruption of the menses, followed by a more abundant and painful return of them than usual, instead of a true abortion, or miscarriage.

Ovum often escapes in first two months of pregnancy.

Abortions, resulting from a diseased state of the patient, are generally preceded by feverish chills and shiverings, want of appetite, heat, nausea, thirst, pain in the loins, lassitude, lowness of spirits, palpitations, paleness of countenance, livid eyelids, dull eyes, and bad breath.

Abortions resulting from diseased state of patient.

The more advanced the term of pregnancy, the nearer do the symptoms approach to those of delivery at the full time; and the nearer, also, do its consequences assimilate to those following upon a natural confinement, as the discharge, after-pains, milk-fever, etc. In some instances, the dead fœtus is retained in the uterus an extraordinary length of time. A case occurred in my own practice, where a female carried a dead fœtus, which perished about the sixth month of pregnancy, eight months; and it was then expelled, very much shrunken and shrivelled, but entire, and without any signs of decomposition. In a case of abortion to which I was recently called, the practitioner in attendance stated the fœtus to have come away two or three days previously. Upon inquiry as to the discharge of the appendages, I was led to recommend an examination, when they were found lodged in the

A dead fœtus.

vagina. After their removal, the patient rapidly recovered.

Spontaneous abortion.

When abortion takes place spontaneously, without any very manifest or sufficient cause, it is often unattended by pain or difficulty, leaving behind it scarcely any unpleasant consequences; but this form of abortion is most liable to recur. Abortion is chiefly dangerous from the hemorrhage attending it, and the risk is in proportion to the amount of the effusion. In rare cases, abortion may be productive of positive good, when it occurs before the third month. In such cases, the flowers, or catamenial discharge, has been observed to become regular in patients, who had been previously irregular, and by an improved state of health, even promoting the fecundity of the patient. The treatment of patients liable to abort is various. Where the system is relaxed, tonics should be administered. The maintaining of a horizontal position is advisable for some patients. Mattresses should be used. Their rooms should be large, cheerful, and airy. All anxiety of mind should be prevented. The diet, under ordinary circumstances, ought to be light and digestible. Only mild laxatives of the bowels should be used. Energy should be imparted to the generative organs by change of air, the use of tonic mineral waters, both internally and in the form of baths. Where there has been abortion, it is important that the practitioner should in every instance be satisfied as to the expulsion of the embryo and the appendages, for he may be deceived in this matter; a small remnant of the placenta, or of the membranes, when still left in the cavity of the uterus, or even lodged in its mouth, being often sufficient to keep up an exhaust-

Abortion dangerous from hemorrhage.

Abortion sometimes beneficial.

Liability to abort; how treated.

Tonics.

ing and even dangerous discharge. Ergot of rye, or a curved dressing forceps, are both used to effect a clearance of the appendages from the passages. The weakness occasioned by abortions requires the use of tonics, with mineral acids; nourishing, but light diet; a wholesome air; gentle exercise; and the tepid or cold salt-water bath. Certain kinds of mineral waters, namely, those of the chalybeate class, are found very beneficial.

In regard to abortives, a few remarks may not be inappropriate. Upon the whole, blood-letting may be set down as among the popular errors. This is a very old error. In point of fact, bleeding is often used as a preventive measure against abor-

Foot-bleeding.

tion. It is a very popular opinion among unprofessional people, that bleeding from the foot is a certain means of bringing on an abortion, and accordingly it is often resorted to for this purpose. But, like the former, it is nothing more than a vulgar error, wholly unsustained by reason or experiment. In France, and sometimes in this country, leeches are applied to the anus or vulva, with a view

Leeches and emetics.

to bring on abortion; but the practice is no more successful than general blood-letting. Emetics can by no means be considered as exerting any peculiar action on the womb; although such as produce a powerful impression on the general system, as antimony, are unsafe during pregnancy or the advanced stages of pregnancy. Abortion may follow their administration, as we see it follow any violent shock to the system; but it is well estab-

Vomiting.

lished that emetics exert no specific influence over the womb, for nothing is more frequent than severe vomiting during the early periods of pregnancy; and sometimes, throughout the entire duration of

it, and yet without producing abortion. Cathartics have also been employed for the destruction of the fœtus, but with the same uncertainty. It is said that powerful cathartics, especially those which act chiefly on the rectum, cannot be administered without danger to the life of the fœtus, in cases of predisposition to abortion. Cathartics.

My own experience is in accordance with this view of the subject — abortion is a frequent occurrence in dysentery. Emmenagogues, so called, from their supposed efficacy in bringing on the flowers, are usually resorted to by females, for the purpose of causing abortion; especially oil of tanzy, the oil of savine, rue, hellebore, aloes, gamboge, and cantharides. These excite circulation in the pelvis, give rise to a sensation of bearing-down in the womb, especially in females predisposed to falling of that organ; increase the menstrual discharge, when given during these conditions. These all act by their violently stimulating powers, and if abortion follows, it is in consequence of a violent action exerted on the general system. I have known an instance where sixty drops of the oil of savine were taken, every morning for a week, for the purpose of producing abortion in the sixth month of pregnancy. It brought on violent pain in the abdomen and region of the womb, and the woman died on the third day, after the delivery of a still-born fœtus. There is no drug which will produce miscarriage in women who are not predisposed to it, without acting violently on their systems and probably endangering their lives. Ergot is the only agent which possesses a specific influence over the womb in exciting it to contraction. Some contend that My own experience. Emmenagogues. Ergot.

its powers are limited to the period of delivery, and to the state of full expansion of the womb; and that it has no tendency to induce abortion. But I am satisfied this opinion is erroneous, as I have known contractions of the womb brought on during

Mechanical means.

the early stages of pregnancy by its use. Mechanical means for inducing abortion consist of external violence applied to the abdomen or loins, or of

Instruments.

instruments introduced into the womb. But the violence may be so great as to endanger the life of the mother, and defeat its object. I have known pregnant females to jump violently from a considerable height; run up and down stairs with great rapidity; strike themselves over the abdomen, and roll themselves upon the floor, for the purpose of procuring abortion, and all without success; so that, unless there is a predisposition to the habit to this accident, I conclude it is not so easily brought on as is generally supposed.

But the most frequent and successful mode of inducing abortion is the introduction of instruments into the womb. This practice is carried on to an alarming extent in all our large cities. Life is frequently sacrificed in this way by unprincipled and reckless individuals of both sexes; and yet, for the most part, they escape punishment. Sometimes, a female has been known to probe herself with a piece of whalebone. After the fœtus is quick in

When induced abortion is infanticide.

the womb, abortion amounts to infanticide; that is, after the sixth or seventh month of pregnancy, when the child is capable of maintaining an independent existence. But it is oftentimes difficult to determine, from a medico-legal stand-point, when a real abortion has been committed, because we are to bear in mind that the same derangement of parts

will result from a false birth, as from the expulsion of a fœtus. In fact, criminal abortion is an offence, from the very nature of the case, difficult to establish. Hence the extent of it can only be guessed at.

Criminal abortion difficult of proof.

I shall close this chapter with extracts from, and a brief examination of, Dr. Storer's Prize Essay, already quoted. It was written with the avowed purpose of recalling our female population to a deep sense of the duties of maternity devolved upon them by nature, and it accomplishes its purpose most successfully. I cannot agree with all the conclusions and dicta of this essay, but its general ability and exactness of statement have made it a powerful instrumentality for producing a proper sentiment on the subject of induced abortion in the community. In his preface, the doctor relates his experience. "My opinion," he says, "is sought, relating to the duty of medical men, in cases where the woman is feeble, and where there is present some severe form of local or constitutional disease, and also where a previous pregnancy has been attended with suffering and has terminated unfavorably. I have been repeatedly requested to direct the course to be pursued, where there exists mental derangement, either in husband or wife. A similar question is that relating to habitual intoxication, which, in a very large proportion of cases, is also a form of disease, to be viewed and treated as such, and thus very often found curable." It is a well-known physiological fact, that children begotten during the drunkenness of one or both their parents are liable to be idiots. Manifestly it is wrong to propagate congenital insanity and idiocy.

Dr. Storer's opinion.

Michelet, in his work entitled "L'Amour,"

says: — "Man's love is manifested much too often at night, from the base excitement caused by a luxurious banquet, especially after winter and autumn feasts, when the harvest is in, the granaries full, and the grapes gathered." Thence come those numerous conceptions of the winter months, begotten infamously without love, upon the wife submissive but not consulted.

In general, Dr. Storer takes uncompromising ground against induced abortion and miscarriage, as ultimately fatal to the mother, even if temporarily successful; and he thinks that where abortion is absolutely necessary for the mother's sake, it should never be decided upon by a single physician. "It is suggested to me," says Dr. Storer, "that this, that, or another friend of the inquirer intentionally miscarried, and came off scot-free." But the doctor tells his patient that, sooner or later, at the turn of life particularly, "the subject even of a successfully induced abortion will find herself the subject of some slowly progressing and insidious disease, perhaps cancer, for which she has only to thank her own folly."

Induced abortion always dangerous, sooner or later.

"It is urged," says Dr. Storer, "and this by very many women, that much of the shame attributed to them, for the various improper and unphysiological measures to which they resort, in reality belongs to their husbands." "This," he says, "I am compelled to admit to be true. The severest condemnation belongs to that large class of married men, who, by their inconsiderate, selfish, and brutal behavior, render their wives' health wretched and their lives almost unendurable. Few are aware of the extent of the misery, and the unmanly baseness to which I have referred, save those of us to whom are brought the

Brutality of husbands, a cause of improper measures.

breaking hearts and the sad tales of woe." Certainly, in lawful cohabitation, women have rights which their husbands are bound to respect. If, in the gratification of a brutal and insatiable lust, many married, aye, thousands, are forced to unlawful means to save themselves from rapid decline and death, their husbands are the real criminals. Elsewhere he writes, that "it is in a perverted and mistaken public opinion that the secret of the whole matter lies." Ladies boast to each other of the impunity with which they have aborted, as they do of their expenditures, of their dress, of their success in society.

Woman's rights in cohabitation.

Husbands, the real criminals.

There is a fashion in this, as in all other female customs, good and bad. The wretch whose account with the Almighty is heaviest with guilt too often becomes a heroine. So truly is this the case, that the woman who dares, at the present day, publicly or privately to acknowledge it the holiest duty of her sex to bring forth living children — that first, highest, and, in earlier times, almost universal lot — is worthy, and should receive, the highest admiration and praise.

Dr. Storer will not admit the force of the usual excuses and pretexts for induced abortion, although he does not deny their sincerity, and he thinks that the mass of our women are ignorant of the true character of wilful abortion. The fear of child-bed, he will not admit as an excuse; because, since the discovery of anæsthesia, child-bed can be robbed of its pains. He regards induced abortion as generally more perilous than natural delivery at the end of the usual period of pregnancy.

Ignorance as to true character of wilful abortion.

CHAPTER XI.

BEAUTY: ITS VALUE TO WOMAN.

An old Grecian poet, famous for his love of the sex, or, in the words of Martin Luther, of women, wine, and song, has said that beauty is to woman what swiftness is to the deer, and strength is to the lion, or something to that effect (for I remember not the precise words); and indeed it would be difficult to exaggerate the power of female loveliness. It has, in gone-by ages, enabled women to subdue the very subduers of the world. As long as the sex possesses it, they can get along without the suffrage.

The sort of a woman to marry.

An English writer on the subject of the reproductive organs says, in describing the sort of a woman to marry, "I have been often asked, 'Shall I (other things being equal) marry for beauty?' I answer, Yes; if you can get your beauty to accept you." Let ugly people talk as they may about intellect, and the evanescent charms of mere outward comeliness, still, some degree of beauty is, if not the first, certainly the second requisite in most cases to a happy married life.

Sidney Smith's opinion.

Says Sidney Smith, "How exquisitely absurd to tell girls that beauty is of no value, dress of no use! Beauty is of value; a girl's whole prospects and happiness in life may often depend upon a new gown or becoming bonnet; and, if she has five grains of common sense, she will find this out. The great thing is to teach her the just

value, and that there must be something better under the bonnet than a pretty face for real happiness. But never sacrifice the truth."

A tolerably large acquaintance with the domestic histories of men, in all ranks of life, has shown me that next to a good disposition, nothing in a wife is so likely to ensure domestic happiness as good looks, especially if they are of a lasting kind, not mere bloom or prettiness. We all know that good looks are the best passport in the world. Even children, the most unprejudiced witnesses possible, frankly admit that they like So-and-so, because she or he has a nice face. It is unwise to undervalue, or pretend to undervalue, the woman's advantages of comeliness of face and form. A woman with a good physique starts with advantages that other women cannot acquire. She is spared a thousand and one temptations — jealousy, and other low feelings, supposed to haunt occasionally the female breast — with which her less favored sisters have to contend. Physical attractions, again, help to tide over many of those little domestic differences which will occur in married life.

Domestic happiness and good looks.

Man's sexual sense will be roused by beauty, when no other influence can touch him. It would be a curious inquiry, perhaps worth pursuing, whether, even among the lower classes, a comely-looking woman was ever ill-used by her husband, except when he was drunk. In a state of nature, we find that animals select the most perfect forms for their mates, thus instinctively providing for as perfect species as possible. It would be well, in many respects, if this example were more closely followed by human beings.

A fact in zoology.

I have submitted the above remarks to a clever

Opinion of a clever woman.

unmarried woman, and she has favored me with several additional observations on the subject, of which I gladly avail myself. Almost the first thing a girl hears in the nursery, is, that beauty soon fades, and that ugly girls are as much valued as handsome ones; but, on their first step over the threshold into the world, a woman discovers the fallacy of this early teaching, and I perfectly agree with Sidney Smith, in his remarks upon personal beauty as affecting the destiny of women. Comeliness of form and beauty of feature ought not to be despised, as they are the gifts of God. Milton represents Eve as the embodiment of female loveliness. Sarai, the wife of Abraham, was a fair woman to look upon; and Rachel, Jacob's best-loved wife, was beautiful and "well-favored."

Milton's Eve.

It is, however, very difficult to define in what beauty consists. It is more a kind of pleasure conveyed to the mind of the beholder than any special personal attraction of form or figure. All ages and nations agree in worshipping beauty of some sort or other. We see it portrayed in pictures and statues; and one of the great reasons for supposing that it is considered desirable in the eyes of man, is, that where it does *not* exist, women frequently try to supply its place by artificial means. It is said that Madame de Stael would have given up all her fame and renown to have been as beautiful as her friend, Madame de Rocca; and I doubt very much whether we should have felt the same degree of pity for Mary, Queen of Scots, had she been as ugly as her illustrious rival, Elizabeth. It is, however, rare to meet with *very* ugly women.

Madame de Stael, and Mary, Queen of Scots.

A mere set of features, however beautiful in form, seldom please an educated man, unless they

are lighted up by good sense and good temper. A man soon gets tired of the pretty child-wife. After twenty-five, the bloom of youth begins to fade, and yet what is called *beauty* often lasts for years; so that, in a general way, it is the mind and the morals that in a great measure influence the appearance of women, and heighten their attractions in the eyes of men; — and however much they may try to conceal or deny it, yet I believe there is inherent in every woman's heart, a wish to be pleasing and agreeable to the other sex. Much of the happiness in wedded life depends mainly upon the woman. She should be the sharer of her husband's joys, and the comforter of his griefs. She was made for him, not he for her; and her privileges as his companion are great and many. Now, what kind of a woman, in a general way, is most capable of heightening his joys, and lessening his sorrows?

What makes beauty.

Bulwer Lytton has summed up what a man wants in a wife. He wants a *companion*. He does not want a singing animal, nor a dancing animal, nor a drawing animal, — and yet, these three last accomplishments have cost many women years of painful toil to acquire; and they often marry a man who cannot appreciate any one of them. After forty, few women can sing, and few care to dance. What a man looks for most in the chosen companion of his heart and home, is, that she should have added to a pleasing exterior, a well cultivated mind. Let her have also the *mens sand in corpore sano*, good health and good temper; for what we call happiness depends very much upon the temper and the state of the digestion, — and much more so, I believe, than we are generally aware of. Avoid

Bulwer Lytton's opinion.

Hysterical wives.

marrying, if possible, a woman of a hysterical temperament. A few tears may be very interesting during that treacle period called the honeymoon; but in after-life, there is no misery greater for a man than to be united to a woman of delicate fibre and weak digestion, who, upon all occasions, and no occasion, throws herself into that incurable and misery-causing malady — a fit of hysterics. But, after all, men must remember, that women have many sorrows and much suffering to contend with peculiar to themselves. The small cares and domestic troubles of life fall largely upon them, and they require much love and affection to enable them to bear up against the vicissitudes of life. "Men are the oak; women, the ivy." The above are the views of a sensible lady, not seemingly of the strong-minded sort. The poet Wordsworth speaks of a model wife as—

> "A being breathing thoughtful breath,
> A traveller between life and death;
> A perfect woman, nobly planned,
> To warn, to counsel, to command."

CHAPTER XII.

GENERAL HYGIENE OF WOMEN.

I propose, in the following chapter, to make some remarks on the influence of the atmosphere, in its various changes and degrees of temperature, of food, drinks, exercise, and the passions, on the health of women. Though the male and the female are subject to the same laws of life, the same wants, and the same passions; although the act of living ought to be in common as to the two sexes, — there are, nevertheless, in the application of the general hygiene of the female, certain shades of differences, and peculiar modifications, in regard to which, I consider it a duty to offer a few remarks. And, first, in regard to the air, in which we are rooted by our lungs, as an eminent physiologist has observed, as a tree is rooted in the soil. While air is the very breath of life, in our uncertain latitude, it not unfrequently proves the cause of death, with its sudden and unlooked-for changes. As women are by nature more sensitive and impressionable than men, and possess smaller lungs, that are more irritable and more liable to asthmatic difficulties, they are, of course, more injuriously affected than men are, by the influence of atmospheric changes. Precautions in regard to the respiratory organs deserve, in an especial manner, to fix our most particular attention at the approach of puberty, during

Air.

Women sensitive to atmospheric changes.

the act of menstruation, at the change of life, and, in fact, at all the epochs of the life of the female that are characterized by an increase of the general susceptibility.

Should avoid crowded rooms.

Women, particularly these to whom luxury and ease have given a more than ordinarily delicate susceptibility, ought, as far as possible, to avoid crowded and over-heated rooms, where the air cannot be otherwise than unwholesome; neither should they pass carelessly from a high to a low temperature. When exposed to such a transition, with insufficient clothing, they should guard against the pernicious tendency of sudden cold, by keeping up warmth by walking, or any other brisk motion. Those who are of a delicate constitution, and prone to consumption, should wear flannel jackets and drawers, which keep up a gentle excitement of the skin; they may also weaken the ill effects of dampness and cold by using mild tonic drinks, and food both nutritious and easy of digestion. They ought, as far as possible, to refrain from all places of resort where great numbers are assembled, such as balls, shows, concerts, etc.

Flannel jackets and drawers.

Flower-pots and perfumes in chambers deleterious.

The habit indulged in by many ladies, of an excessive use of perfumes which give forth pungent odors, deserves notice, on account of the real danger which accompanies it. Nervous persons should particularly avoid powerful odors and perfumes, even the most delicate; neither ought such to have in their chambers, flower-pots and vases filled with flowers, which are attended with the double inconvenience of affecting the nervous sensibility too powerfully, and of decomposing the air by giving off carbonic-acid gas. There are numerous cases recorded in the medical books, where women of



sensitive organizations have died from the effects of perfumes and the odors of flowers. Women, therefore, should abstain from perfuming their apartments with essences, or oriental pastilles, and from carrying about their persons perfumery and sweet-scented bags, which are capable, not only of powerfully affecting the nervous sensibility, but act as the exciting causes of syncope, of asphyxia, and a variety of spasmodic disorders, to which the sex are peculiarly liable.

Food and drinks.

In general, I remark under the head of alimentary regimen, that the food of women ought to be proportioned to their constitutions and to the exercise they undergo. Their taste naturally inclines them to prefer such dishes and beverages as are easy of digestion; and most of them, likewise, are very fond of fruits, preparations of milk, and all the lighter kinds of food, or such as are taken from the vegetable kingdom. Women are, in fact, natural vegetarians. But some there are, who, giving way to a false appetite, have the habit of overloading the stomach with food. This leads to corpulency and an excess of *embonpoint*, which deprives the body of its suppleness, its activity, and its natural proportions, and is as unfavorable to beauty and health as leanness itself. Women are also to be met with (they are exceptional among their sex, I am happy to say), who are extremely addicted to spirituous and aromatic drinks. Those who thus transgress the laws of health are found to be barren, lean, of a bilious temperament, and subject to hemorrhage of the womb, menstrual disorders, diseases and eruptions of the skin, and also to inflammation of the womb and bowels. Ladies who desire to retain, during the longest possible period,

Stimulating foods and drinks to be avoided.

the advantages of youth, of beauty, and, above all, of health, will wholly abstain from liquors, from stimulating and highly-spiced dishes, from fat meats, pastry, and in one word, from all kinds of food artfully prepared to stimulate the appetite beyond its healthy craving, and create, as it were, an unnatural appetite. A female glutton or inebriate is far more revolting than one of the opposite sex, because we naturally look for delicacy and personal comeliness in woman. Light kinds of vegetable food; meats of easy digestion; fish, birds, and game plainly dressed; milk, in its various preparations; fruits; herbaceous vegetables; and lastly, water, either pure or with a little wine. Such should be the chief articles of diet for a woman, from puberty to the change of life. I must give it as my opinion, that the frequent use of tea and coffee is in general hurtful to nervous ladies, and especially to those who shine less by their intellectual qualifications than by their beauty, and all the perfections of their merely physical nature.

The excretions to be attended to.

Our bodies are all the time in a state of composition and decomposition. We are being constantly rebuilt and unbuilt. We are not only constantly taking in matter from the outside world, to repair the waste of our bodies, but we are giving it back again in various ways in the shape of excretions. Our health depends upon the harmony of this double action of the animal machine. Not only should the menstrual and fœcal discharges be attended to, and promoted, if necessary, to guard against suppression or costiveness, but it is needful, also, for women to watch the state of the perspiration; remembering, that, on the one hand, too much perspiration brings on general weakness,

and renders the skin susceptible to the changes of the weather; whilst, on the other hand, a sudden suppression of the sweat occasions an infinity of disorders of a nature more or less severe. To keep up a gentle perspiration of the whole skin; to keep the person perfectly clean; to dress moderately and suitably as to the season; to abstain from all immoderate exercise; and, lastly, to avoid sudden transitions from heat to cold,—such are the means by which the female may keep up a constant and regular flow of healthful action in her system. To keep herself in a perfect state of health, the female should addict herself to a moderate amount of exercise, which should end, however, as soon as it becomes fatiguing.

Exercise should be moderate.

I ought also, in this connection, to speak of the great value of rural pursuits as a means of promoting health in ladies. The fragrance of plants and flowers exhaled at sunrise, when the dew is on, the oxygen which is set free in torrents under the influence of light, the ravishing aspect of nature, the melodious song of the birds,—all serve to excite the most delicious sensations, and impart to the organs health and strength, and to the mind cheerfulness and elasticity;—and here, I cannot forbear quoting from Michelet's "La Femme," from his chapter entitled "Sun, Air, and Light." He gives us, not only the poetry but the truth of the subject:—

Rural pursuits.

"The human flower, more than all others, craves the sun. The sun is its first and supreme initiator into life. The first duty of love is to bestow on the child, and the young mother also, who was only yesterday a child, shattered by the *accouchement*, wearied with nursing, plenty of light and salubrious air. Grant her the blessing of a good exposure,

A quotation from Michelet's "Woman."

that the sun may cheer her with his first rays, loving and regarding her long, revolving round her at mid-day, even at two o'clock still warming and illuminating her, and leaving her only with regret. Leave to those who live the artificial life of the *beau monde*, the splendors of apartments turned toward the evening. Kings, the great, and the idle, have sought for sunsets in their Versailles to glorify their fetes; but whoever sanctifies life by labor, whoever loves and has his fete with his beloved wife and child, lives most of all in the morning. To himself, he secures the freshness of the early hours, when all life is energetic and productive. To them, he gives the joy, the first flower of gayety, which enchants all nature in the happiness of its awakening. Thou, whose happiness it is to rear and nurture those two young trees of Paradise, — the young wife who lives in thee, and her child which is thine own, — consider well, that if thou wouldst have her live, and bloom, and give good milk to that dear little one, thou must first provide her with the aliment of all aliments, vital air. What a misfortune, how sad a contradiction, to expose thy pure, chaste, charming wife to a dangerous atmosphere enough to poison her, body and soul! No; not with impunity will a delicate, impressionable, and penetrable woman receive the horrible *melange* of a hundred vitiated, vicious effluvia, that rise from the street to her — the breath of unclean spirits, the pell-mell of smoke, vile emanations, and unhealthy dreams, which hover over our sombre cities. Woman wants a garden, a little garden. She does not easily flourish away from its vegetable harmonies. All the legends of the East place the commencement of life in a garden. A pure and capable

people, the Persians, believed that the world began in a garden of light."

Among the exercises to be regarded as most suitable for females are those connected with housekeeping, walking, as an amusement or prescription, riding on horseback, jumping, and above all, dancing, if it be not continued to a late hour of the night, nor indulged in immediately after a repast, or during the catamenial flow. The waltz, which has a very good result with many opponents, conjoins with the disadvantage of fatiguing too much, the greater one of propelling the blood too strongly towards the principal internal organs, especially the heart, lungs, and brain. Speaking, reading aloud, and above all, singing, contribute more powerfully than might be supposed, to the maintenance of the health, and the prevention of many affections of the lungs and stomach. It is impossible to repeat too often, that exercise is the surest antidote to the continued suffering complained of by many ladies in high life. Let a languishing coquette, pale and spleeny, keep company with strong, healthy, village girls, and participate in their labors as well as their amusements for awhile, and she will soon find herself changed for the better. Her digestion will be restored; freshness and bloom will revisit her cheeks; her whole nervous system will be strengthened; and languor will give place to a stable and brilliant state of health. Rest, which is as needful as exercise, should be enjoyed in proper proportion. Late hours are always prejudicial to the health of the sex, because they cannot repair in the morning the losses of sleep at night; all the organs suffer; the functions are deranged; the nutrition is imperfect; the physi-

Kinds of exercise most suitable.

Necessity of proper sleep.

cal constitution loses its energy; and the appearance and bloom of youth soon depart, and give place to wrinkles and old age. But, although sleep is a means of restoration, with which nature endows us, it ought not to exceed certain bounds; that is, it ought not to be prolonged beyond from seven to nine hours. Sleep solicited by too soft a bed, plunges the nervous system into a sort of stupor, brings weakness rather than strength, followed by torpor of the circulation, and not rarely by hemorrhage. Upon the whole, the female ought to retire early to bed, be up betimes in the morning, and pass her waking hours in occupations that may exercise without fatiguing the organs.

Excessive sleep debilitating.

Influence of the passions and feelings on health.

The influence of the various passions and emotions upon the susceptible organization of woman, and upon her health, is an important branch of female hygiene. Woman is a creature of emotion and feeling, far more so than man. She reaches conclusions by her feelings, rather than by her reason or cold processes of logic. She feels that a thing is so and so. She is, in fact, impressible to the last degree. A noted philosopher says that the passions are the celestial fire that vivifies the moral world; it is to them that the arts and sciences owe their discoveries, and man the elevation of his position. It is true, however, that while some of them are useful to him, the greater proportion of them agitate the current of his existence, fill it with storms, and shorten its date. Their influence upon health is questioned by none, whether they act slowly, or burst forth with impetuous violence; in the former, they are like a concealed poison, that destroys; in the latter, like a devouring flame. Notwithstanding that each one of the passions pos-

sesses a character peculiar to itself, and shows itself by characteristic signs, they all have this in common, that they disturb the legitimate action of the organs. The intense passions, such as jealousy, hate, fear, envy, and grief in its varied forms, direct their action principally upon the stomach, liver, and womb, all whose functions they are capable of disturbing. The intense passions, as well as emotions, whether agreeable or painful, felt in excess, impart shocks so violent, that the most alarming symptoms, and even death itself, may be brought on by them. Tissot knew a female at Lausanne, who fell into convulsions whenever her rival was mentioned in her presence. In the annals of France, we see that a princess of Conde died of jealousy on hearing that her husband had attached himself to a lady of honor of Catherine de Medicis. Valerius Maximus speaks of an Athenian lady who lost her speech in an excess of rage. Deaths from a broken heart or hopeless affection sometimes occur. The case of a lady is recorded, who perished with peripneumonia in the course of two days, with which she was seized upon reading a letter announcing the death of her son. Let us further add, that a sordid interest led to the sudden death of Leibnitz's neice. That celebrated philosopher had scarce yielded his last sigh, when his avaricious heiress caused his trunks to be opened, and, upon seeing the piles of gold he had bequeathed her, was so filled with delirious joy, that she expired before she could count them. We also observe that the daughter of Cromwell, after the execution of Charles I., was so indignant at having for her father the assassin of her king, that she died of despair.

Danger of excessive and sudden shocks of joy or sorrow.

Mental labor prejudicial to health of female.

Although the lively emotions and impetuous movements of the soul do not always produce such fatal effects, they always act in an injurious manner upon the system, and chiefly among women, whose imaginations are commonly of an exalted cast. I conclude with remarking, that literary labor, abstract studies, protracted meditations, which, in a manner, concentrate all the vital forces upon the organ of thought, are also very prejudicial to females. Conflicts of the mind are especially hurtful to them at the period when nature calls upon them to fulfil the important functions of their sex; and at an age when they ought to shine, rather by the advantages and graces of youth, by the art of pleasing, and the charms of their conversation, than by a scientific or literary reputation, which men even never purchase but at the expense of their health and happiness.

CHAPTER XIII.

MAGDALENISM; OR, THE SOCIAL VICE.

Cold eyelids, that hide like a jewel
  Hard eyes that grow soft for an hour,
The heavy white limbs, and the cruel
  Red mouth like a venomous flower;
When these are gone, with their glories,
  What shall rest of thee, then; what remain,
O mystic and sombre Dolores,
  Our Lady of Pain?

Seven sorrows the priests gave their virgin;
  But thy sins, they are seventy times seven;
Seven ages would fail thee to purge in,
  And then they would haunt thee in heaven,—
Fierce midnights and famishing morrows,
  And the loves that complete and control
All the joys of the flesh, all the sorrows
That wear out the soul. — SWINBURNE.

In a work on sexual physiology, and especially the physiology and to some extent the pathology of woman, I cannot, of course, omit the momentous social subject which forms the caption of this chapter. It is a subject which the prudery of British and American society, both with their strong admixture of Puritanism, attempt to ignore; but it will not be ignored.

Not long ago, a spasmodic attempt was made, by what was called a "Midnight Mission," to reclaim the *hosts* of magdalens who nightly infest the pavements of New York; but I have searched in vain, of late, the New-York journals for any notice

of this movement, and I therefore conclude that it was simply one of those virtuous spasms to which we are periodically subject, which we deem a sufficient notice of a momentous subject to entitle us to another long period of neglect and forgetfulness. One of the greatest and most caustic of British female writers has truly said, that, "to such grievances as society cannot readily cure, it usually forbids utterance on pain of its scorn, this scorn being only a sort of tinselled cloak to its deformed weakness." A writer who has probed the subject of prostitution, both at home and abroad, and in all ages, to the quick, says arguments are unnecessary to prove the existence of prostitution. The evil is so notorious, that none can possibly gainsay it. But when its extent, its causes, or its effects are questioned, a remarkable degree of ignorance, a carelessness, is manifested. Few love to know the secret springs from which prostitution emanates; few have any desire to know the devastation it causes. Society has laid a formal prohibition upon the subject; and he who presumes to argue, that what affects one may injure all; he who believes that the malady in his neighbor's family today may visit his own tomorrow; he who dares to intimate that a vice which has blighted the happiness of one parent, and ruined the character of one daughter, may produce, must inevitably produce, the same sad results in another circle; in short, he who dares allude to the subject of prostitution in any other than a mysterious and whispered manner, must prepare to meet the frowns and censure of society. The self-righteous world may wrap itself in a mantle of prudery; nevertheless, there is now existing a moral pestilence, which creeps insidiously into the

Remarkable ignorance of the subject.

Society discourages investigation.

privacy of the domestic circle, and draws thence myriads of its victims. There is an ever-present physical danger, so fatally destructive, that the world would recoil, as from a serpent, could they but appreciate its malignity. There is a social wrong, which swells the public taxes, and increases individual outlay for a vice which has hitherto been kept in studious concealment. So widespread has been the baneful influence of prostitution, that there are comparatively few but have suffered, through friends or relatives, if not in their own persons. Indeed, it may be said, that the blood of civilized mankind is largely tainted with the terrible diseases of prostitution through inheritance. Whole barbarous communities in the Pacific have been extirpated by those diseases. The widespread disease of scrofula is supposed to be the far-off effect of syphilis, cursing generation after generation, until it extinguishes families and races.

Prostitution ineradicable.

It is a mere absurdity to assert that prostitution can ever be eradicated. Strenuous efforts have been made at times. The whole power of the Church, where it possessed, not merely a spiritual, but an actual secular arm, has been in vain directed against it. Nature defied the mandates of the clergy; and the threatened punishments of an after-life were futile to deter men from seeking, and women from granting, sinful pleasures in this world. In vain has medical science shown that infected parents of this generation will bequeath to their posterity a heritage of ruined powers; that the malady which illicit pleasure communicates is destructive to the hopes of man; and that the human frame is perceptibly and regularly deteriorating by the effects of this poison. Laws have been placed upon the

Prostitution has tainted the blood of the race with its diseases.

Prohibitory legislation a failure.

statute-book, declaring prostitutes, and houses of prostitution, and all who live by such means, violaters of the public peace and morals. At certain intervals, some poor and friendless woman is made a scape-goat of, for five thousand of her class; while others equally guilty, with money, drive their traffic with impunity.

Prostitution old as human society.

Prostitution is as old as human society. It is certain that Jews and Jewesses were subject to diseases similar to common gonorrhœa; that these diseases were infectious; and that Moses forbade all intercourse with persons so infected. Prostitution was, in fact, legally domiciled in Judea at an early period, and never lost the foothold it had gained. Of the manner in which it was carried on, an idea may be formed from the very vivid picture in Proverbs (chap. vii. 6, etc.). "For at the window of my house, I looked through my casement, and beheld among the simple ones, I discerned among the youths, a young man void of understanding, passing through the street near her (the strange woman's) corner; and he went the way to her house, in the twilight, in the evening, in the black and dark night; and, behold, there met him a woman with the attire of a harlot, and subtile of heart. (She is loud and stubborn; her feet abide not in her house: now is she without, now in the streets, and lieth in wait at every corner.) So she caught him, and kissed him, and with an impudent face said to him, 'I have peace-offerings with me; this day have I paid my vows. Therefore came I forth to meet thee, diligently to seek thy face, and I have found thee. I have decked my bed with coverings of tapestry, with carved works, with fine linen of Egypt. I have perfumed my bed with

The Jewish prostitute, as described in Proverbs.

myrrh, aloes, and cinnamon. Come, let us take our fill of love until the morning; let us solace ourselves with loves.' With her much fair speech, she caused him to yield, with the flattering of her lips she forced him. He goeth after her straightway, as an ox goeth to the slaughter, or as a fool to the correction of the stocks."

Prostitution in Egypt and Babylon.

Egypt of old was famous for harlots. Egyptian blood runs warm. Girls are nubile at ten. The religious festivals of ancient Egypt were full of sexual abominations. In ancient Babylon, every female was obliged by law to prostitute herself once in her life in the Temple of the Chaldæan Venus. Once inside, the woman could not leave until she had paid her debt. Some, who were plain, remained there as long as three years; but, as the grounds were always filled with voluptuaries in search of pleasure, the young and beautiful seldom needed to remain over a few minutes. Ancient Grecian prostitution is the subject of many elaborate treatises. Its details are too vile to be dwelt upon to modern ears. The higher class of Grecian prostitutes, like Aspasia and Lais, were highly educated, and attained to great social influence.

Prostitution in Greece.

Any one who has been to the unburied cities of Pompeii and Herculaneum, knows how beastly and abominable the pagan life of the old Greeks and Romans was. The pictures and sculptures dug up there, and which have been found in the houses of the higher classes, would make the most abandoned Christian blush. Unheard and unspeakable modes of gratifying their lusts were resorted to by the ancient Pagans. Modern prostitution, in its vilest forms, does not approach to the beastliness of that of antiquity, when woman was regarded as a mere

Abominations of ancient Paganism.

animal. Paganism was altogether foul in the matter of sexual love. In fact, it was nothing but mere lust. Perhaps the most marked originality of the Christian doctrine, was the stress it laid on chastity.

Chastity, a badge of Christianity.

It has been remarked, that even the most austere Pagan moralists recommended chastity, on economical grounds alone. The apostles exacted it, as a moral and religious duty. From the first, the Christian communities made just boast of the purity of their morals. The chastity of the Roman virgins was, at best, but partial, — the purest among them being accustomed to unchaste language and lewd spectacles. Marriage, among the early Christians, was a holy institution. The Romans could not conceive a chaste soul in a body that had endured pollution, even against the will of the ravished person; and hence, for Lucretia, there was no resource but the poniard. But the Christians asserted that the crime lay in the *intention*, and not in the *act*, and that a chaste heart might inhabit a body which brutal force had soiled. Nevertheless, it must be confessed, that many eccentric Christian sects have, from time to time, committed the grossest immoralities. In comparatively recent times, we have seen, in America, as well as in Savoy, a few persons of weak minds give way to religious enthusiasm in a manner which warred against public decency. The Oneida Communists, and the Mormons in Utah, are instances familiar to all. Some have even worshipped in a state of nudity, and indulged in promiscuous intercourse. Some of the early Christian fathers asserted, that if you suppress prostitution, capricious lusts will overthrow society. It is a safety-valve and protection to decent women. One of them recognized and argued, that, as Mary Mag-

Certain gross Christian sects.

Prostitution a safety-valve of society.

dalen had been saved, so might any prostitute, who repented. During the tenth, eleventh, twelfth, and thirteenth centuries, immorality prevailed to an alarming degree. One of the French queens, Catherine of Medicis, used prostitution as a mainspring of her policy. She had a court of sometimes two or three hundred ladies of honor, whom she employed to worm out the secrets of the politicians of the day. They were known as the Queen's Flying Squadron; and, it appears, they performed their duties successfully. It would hardly be possible to find fitting words to record the abominations of the old French Monarchy, before the French Revolution. I cannot longer dwell upon the historical part of my theme, but must come to our own time and country.

Catherine of Medicis.

Prostitution in the United States.

In 1855, William W. Sanger, at that time resident physician of Blackwell's Island, made a searching investigation into the subject of prostitution, so far as New-York city was concerned, aided by the city authorities. The result of his investigation was published in 1859, in a volume, and comprises an amount of information in regard to prostitution, both foreign and domestic, such as can be found in no other work. I shall fill the remainder of this chapter with the facts, figures, and conclusions arrived at by Dr. Sanger, in regard to American prostitution, as it exhibits itself in our great metropolitan city of New York. I must first premise, however, that the last eight years of civil war, and fast life generally, have probably given an immense impetus to prostitution, as to every other form of social vice. Civil war is a fearful demoralizer; and ours has been no exception. Were Dr. Sanger to institute such inquiries now, as he instituted

Our late Civil War increased the social vice.

in 1855, through the aid of the New-York police, he would probably reach a more melancholy and deplorable result than he did in 1855. His Census of Prostitution would be fearfully swelled. There were, according to his account, but about six thousand public women in New York in 1855. Now, they must number four or five times that number. According to Dr. Sanger, about three-eighths of the number of prostitutes are found between the ages of fifteen and twenty years; three-eighths more between the ages of twenty-one and twenty-five; that is, these ages include three-quarters of the aggregate prostitution. Seven out of eight women, who came under this investigation, had not reached thirty years of age. Beyond this standard, each year shows but a few, and of these veterans, the majority were keeping houses of ill-fame.

The ages of prostitutes.

Shakespeare, who included all human existence in the sphere of his observation, says of such: —

Shakespeare's description of a bawd.

"A bawd, a wicked bawd!
The evil that thou causest to be done,
That is thy means to live: do thou but think
What 'tis to cram a maw or clothe a back
From such a filthy vice; say to thyself,
From their abominable and beastly touches,
I drink, I eat, array myself, and live;
Canst thou believe thy living is a life,
So stinkingly depending?"

The courtesan, at the beginning of her career.

While juvenile degradation is an inseparable adjunct of prostitution, premature old age is its invariable result. Take, for example, the career of a female who enters a house of prostitution at sixteen years of age. Her step is elastic, her eye bright; she is the observed of all observers. The *habitues* of the place flock round her; gloat

over her ruin while they praise her beauty, and try to drag her down to their own level of depravity while flattering her vanity. As the last spark of virtue flickers and dies in her bosom, and she becomes sensible that she is indeed lost, that her anticipated happiness proves but splendid misery, she also becomes conscious that the door of reformation is practically closed to her. Her mind becomes tainted with the moral miasma around her; her physical powers wane under the trials imposed upon them, and her career in a fashionable house of vice comes to an end; she must descend on the ladder of sin. Follow her, from one step to another, in her downward career. Today, you find her in aristocratic promenades; tomorrow, she will be forced to walk in more secluded streets. Tonight, you may see her, glittering at one of the fashionable theatres; tomorrow, she will be found in some one of the infamous resorts which abound in the lower part of the city. Today, she may associate with the wealthy of the land; tomorrow, none will be too low for her company. Today, she has servants to do her bidding; tomorrow, she may be buried in a pauper's coffin and a nameless grave. The end.

This is the melancholy decline and downfall of the average prostitute. As soon as a courtesan's youth and beauty fade, she must either descend in the scale, or *starve*. From the fact, that youth is the grand desideratum, it is evident that a constant succession of young people will be driven into this arena, either by force or treachery. The average duration of life among these women does not exceed four years, from the beginning to the end. Of course, there are exceptions; but it is a tolerably well-established fact, that one-fourth of the aban-

Youth, the grand desideratum.

doned women of New York die annually. Neglected while living, they pass from the world unnoticed and unwept. Three-eighths of the New-York prostitutes were born within the limits of the United States. The Southern and Western States, of course, from their sparseness of population and excess of males, contribute but a small quota of the American-born prostitutes of New York. Of course, the constant flood of emigrants landing at New York is a fruitful source of supply of unfortunate females. Emigrant girls are seduced at the ports from which they sail; during the middle passage, and when they tarry in New York for any length of time, they are liable to fall victims. Five-eighths of the New-York prostitutes were born abroad, — Great Britain and its dependencies furnishing the largest proportion.

The majority of the New-York prostitutes have never been married. Among the facts brought to light, was this: Many of these women who have been married continued to cohabit with their husbands, who, of course, had a knowledge of their wives' degradation, and a share in the wages of their shame. New-York prostitutes are shorter-lived than those of Paris, as they are liable to outrageous assaults from lawless rowdies, who beat them for little or no provocation.

Almost every common woman, in the middle or lower classes, has attached herself to some indolent fellow, who acts as her protector ("bully," or "lover," is the common designation,) when she becomes involved in any difficulty with strangers, but who exercises an arbitrary and brutal control over her at other times. Oftentimes an actual love is felt by the woman for "her man," who takes part

in her quarrels, she providing funds to keep him in idleness.

Perils and shortness of a courtesan's life.

The intemperate habits of the prostitutes also tend materially to shorten their lives. In addition to the physical dangers which they undergo, the mental anguish must be considered, which inevitably preys upon the constitution. To this, even the most depraved of them are, at times, subject. In the earlier stages of their career is an agonizing memory of the past; thoughts of home; regrets for the position they have lost. As they proceed in their course, they suffer from anticipation of the future, both here and hereafter. It may be said, in the words of Byron, —

> "But in an instant, o'er the soul
> Winters of memory seem to roll,
> And gather, in that drop of time,
> A life of pain, an age of crime."

More than two-thirds of the courtesans diseased.

Life must be short under such circumstances. More than two-thirds of the prostitutes examined *confessed* that they had suffered from syphilis and gonorrhœa. The real number is probably greater. In other forms of sickness, which admit of a perfect cure, this would be no cause of alarm; but, in this instance, it is a mooted point among medical writers, whether the syphilitic taint can ever be eradicated from the system where it has been implanted. Everybody is competent to determine for himself the amount of public mischief likely to result daily from a mass of prostitutes, two out of every five of whom are *confessedly* diseased. Now, let us see what are the causes which make prostitutes of women. First in order stands "Inclination." A. J. willingly sacrificed her virtue to a man she loved. C. M., while virtuous, had visited dance-houses, where

Causes which make women courtesans.

she became acquainted with prostitutes, and who persuaded her that they led an easy and merry life. And here it should be remarked, that fallen women generally take a malicious delight in reducing the virtuous to their own ignominious condition. Destitution is a potent feeder of the ranks of prostitution. Seduction and abandonment, another. Drink, and the desire to drink, brings a large quota of women to a life of prostitution, in which their unsexly craving is gratified. The old saying is true, that "when a *woman* drinks, she is lost." Ill-treatment of parents, husbands, and relatives is a prolific cause of prostitution. Parents who try to force their daughters into marriage with old men, from mercenary motives, often drive them to prostitution. Desertion, adultery, elopement of the husband, drives many to an abandoned life. Where the husband is a drunkard and beats his wife, what wonder that the woman flies to the house of ill-fame for refuge! A drunken husband means everything that is brutal to a wife.

Desertion of husband.

But it is not necessary to proceed farther with the catalogue of incentives to a life of prostitution. All our large cities are full of traps and pitfalls for unsophisticated young girls. Even employment offices may become, consciously or unconsciously, the traps in which debauchees catch their victims. A respectably-dressed man went into an intelligence office, and represented himself as a storekeeper, residing some twenty miles from New York. He wished to hire a girl as a seamstress and chambermaid, who must go home with him the same afternoon. Glancing around the waiting-room, he soon saw one of sufficiently attractive appearance, to whom he made the proposition. The wages he offered

Traps and pitfalls.

were liberal, the work was described as light, and the woman made an arrangement to accompany him forthwith. He told her that he had a little business to transact before he could leave the city, but that she could wait for him at his sister's until the cars were ready to start. She had but a slight knowledge of the temptations of New York, and went with him into a brothel, the keeper of which he stated to be his sister. Here she remained for some hours, waiting his return. The "sister" expressed her surprise at his absence, but concluded that his business had detained him; and with apparently a kind feeling, told the girl that she would be welcome to sleep there that night. Her suspicions were lulled by the seeming respectability of the persons, and she remained. In the course of the evening, the character of the house became evident, and then the proprietress offered to engage her as a servant, solemnly promising that she should not be exposed to any insult. Almost a total stranger in the city, and destitute of money, she consented. A very few days in such a hot-bed of vice was sufficient to deaden her sense of right and wrong, and within a fortnight, she was enrolled a prostitute.

Boarding-schools—bad influence of.

An incomplete statement of the causes of prostitution would be presented, if the injurious effects of some of our fashionable boarding-schools were suffered to pass without notice. Startling as such a proposition may appear, it is no more strange than true. A system of education, the prominent design of which is to impart a knowledge of the (so-called) modern accomplishments, to the almost total exclusion of moral training; to make the pupils present the most dazzling appearance in society, regardless of their real interests and duties, does, in some cases, lead to unhappy results.

Importance of a knowledge of Physiology.

One of the real improvements of modern times, is the introduction of physiology as a branch of education in our schools. Yet it is to be regretted that the knowledge communicated to youth upon a subject so important, is still extremely limited. Indeed, such is the present state of public opinion, that any text-book or teacher, that should impart thorough instruction in regard to *all* the organs and functions of the human body, would be considered entirely unfit for use or duty. Notwithstanding this, the young of both sexes *do* become informed upon the subjects of marriage, procreation, and maternity. And how? By force of natural curiosity and injurious association. It is the imperative duty of parents to rightly inform their children concerning the things which they must inevitably know. In consequence of their neglect of this duty, both boys and girls are left to find out all they can about the mysteries of their being, from ignorant servants or corrupt companions. Let fathers teach their sons, and mothers their daughters, at the earliest practicable age, all that their future well-being makes it necessary for them to know. The information thus acquired will be invested with a sacredness and delicacy, wanting when obtained from unreliable and pernicious sources. Thus would many of the injurious influences, consequent upon present secresy upon such subjects, be avoided. Of the evil habits and practices common among youth, physicians are well cognizant, and many a parent has had to mourn the sad results, in the premature death or dethroned reason of children, who, with proper physical training, might have been their pride and joy. Next to the responsibility of parents in this matter, is that of teachers, who, with

all judiciousness and delicacy, should supply the deficiencies of ignorant or incapable parents, in the physiological education of all committed to their care.

I have no space to go into the subject of the insufficient wages of needlewomen, and others in our great cities, who can earn by their utmost exertion but a scanty pittance, to keep soul and body together. Of course, here is a source of prostitution, a most fruitful one.

All classes of society exposed.

Facts show that all classes of society are exposed to the influences which result in prostitution, from the children of men of property, bankers, merchants, and professional men, down to the families of common laborers. It may be assumed as an almost invariable rule, that courtesans in all countries are in the habit of using alcoholic stimulants, to a greater or less degree, in order to maintain that artificial state of excitement which is necessary to their calling. A London girl of this class said to one, inquiring into her mode of life, "No girls *could* lead the life we do, without gin!" — and drinking is undoubtedly universal among abandoned women. Among the more aristocratic prostitutes, it is considered a disgrace to be absolutely intoxicated, and the keeper of a first-class house would scarcely retain a boarder who was addicted to habitual inebriety. Still, the fastidious are ready and eager to sell champagne, or what passes for it, to any visitor of liberal disposition, and will generally condescend to assist him to drink it, — of course, inviting all the ladies to participate.

Drinking and prostitution.

It certainly seems a very incongruous association, to connect religion and prostitution; to place in juxtaposition the most noble aspirations of which

the mind is capable, and the lowest degradation to which the body can descend. Still, a professed respect for religion is common among courtesans. Even with their neglect of the outward requirements of religion, and while in the actual commission of known and acknowledged sin, they still preserve many traits which are to their credit. They possess one of the chief virtues belonging to the female character, which never seems to become extinct, or materially impaired, namely, kindness to each other when sick or destitute; and, indeed, all who are suffering or distressed.

Respect for religion among courtesans.

I have not space to proceed farther with details, and must wind up with a few remarks on the possibility of checking the social vice, or at least mitigating the terrible evils which flow from it. In 1855, it was computed that the enormous sum of seventy-eight thousand cases were treated in hospitals and privately, for *lues venerea*, in New York alone. To such an extent did the courtesans of that city, who were suffering from syphilitic taint, infect their customers; and thus scourge humanity for generations to come!

Possibility of checking the social vice.

Extent of syphilitic taint.

Of the actual extent of venereal disease in any given city, it is impossible to speak with absolute certainty. As for prohibitory measures and legislation, it is now generally admitted that they have signally failed everywhere. The French method is to put prostitution under the immediate supervision of appointed officers of the law and medical inspectors. Prostitutes are registered, and subject to periodical examinations. When diseased, they are removed to hospitals. Where suppression of a vice is impossible, government should extend all the protection it can, so that, where it is capable of

The French method of dealing with the vice.

a deadly infection, its victims may be as few as possible. Government should be patriarchal in its character, and exercise an effective, but parental supervision over its subjects. Prostitution is more perilous to courtesans and their customers, both in England and America, than it is in France, because the governments of the latter countries content themselves with repressive penal statutes, and exercise no supervision.

When we remember that venereal poison is as destructive, although not so suddenly fatal, as yellow fever, every motive of philanthropy and economy urges the necessity of effective governmental means for its counteraction. Since remedial or preventive measures have been adopted in Paris, the number of cases of disease and the virulence of its form materially abated. Our prohibitory statutes cause prostitution to be conducted in secresy; and philanthropists cannot reach the daughters of misery, to advise and direct them, when they are capable of being saved. They only reach such as have become, from disease and destitution, inmates of magdalen asylums, hospitals, workhouses, and penitentiaries, — when body and soul both are in an almost hopeless state. Even if American society is not yet prepared to take a course directly the reverse of its present prohibitory practice, prudence dictates the adoption of some medium rule by which prostitution can be kept in check, without being encouraged or allowed, as in the Prussian laws, which expressly declare that the vice is "tolerated, but not permitted."

Prussian laws.

As for the fallen woman, "let her feel, that while there is life, there is hope,— dependent on the only one condition, that she shall sin no more, —

While there is life, there is hope.

and what a future you open to her! What a weight you lift off from her poor, miserable spirit, which might otherwise be crushed down to the lowest deep, to that which is far worse than any bodily pollution, — ineradicable corruption of soul."

CHAPTER XIV.

THE SOCIAL SCOURGE (HISTORICAL).

In a work devoted to sexual physiology, it will certainly not be out of place to introduce a brief historical notice of that terrible scourge of wantonness and illicit intercourse, which has exerted such a wide-spread, deteriorating influence on the physique of all modern civilized communities. I allude to what has been called, by way of eminence, the *venereal plague*, or syphilis. This dreadful malady, which has been robbed of some of its lethal poison by the discoveries of modern medical science, has been the bane of illicit sexual intercourse for generations, and has diffused its venom through the veins of the guiltless, as well as the lewd and lascivious.

The venereal plague.

It is supposed that the nations of antiquity were not cursed by this disease. But the supposition is probably a mistake. Whether the diseases termed syphilitic, were of ancient date; whether "the shameful diseases," so called, of the ancient Romans, were the same as the modern syphilis, — is an open question, to be decided by each investigator, as his judgment may determine. It will suffice here to say, that, throughout the Middle Ages, a species of disease, termed sometimes leprosy, sometimes *pudendagra*, appears to have prevailed in France, as in other European countries,

An open question.

The fifteenth century.

and to have chosen for its chief seat the organs of generation. It was not, however, till the close of the fifteenth century, that public attention began to be generally directed to the subject of sexual disease. I shall briefly enumerate the earliest notices of its appearance.

Naples in 1495.

When the French king, Charles the Eighth, entered Naples in 1495 (three years after the discovery of America), he found the city suffering from a plague (syphilis), to which the prejudice of the natives gave the name of "the French Disease," by which name it is even now sometimes called.

The French disease.

The king himself, who was of an amorous disposition, caught it. Italy, said the writers of the day, was attacked simultaneously by the French army and this new disease. Most of the Italian writers accuse the French of its introduction. They affirmed that they got it from the Spaniards, who got it by intercourse with the natives of the then newly-discovered continent of America. At any rate, it first made its appearance, so as to attract general notice in Naples, in 1490; and its origin was ascribed to an untoward planetary conjunction, to use the superstitious jargon of the time. The disease appeared in various parts of Spain in the year following. But sixty years before, in 1430, public regulation had been made in London, to prevent the admission of persons attacked with a disease very similar to syphilis, into houses of prostitution; and requiring the police to keep constant watch over such as should show symptoms of this *infirmitas nefanda*, or direful infirmity. In 1497, all persons in Paris attacked by "the large pox" were ordered to vacate the city within twenty-four hours, and not to return till they were

Superstition in regard to origin of syphilis.

Ancient regulation in Paris.

cured. A sort of hospital was provided for those who could not be moved; and agents were appointed to pay the expenses of their journey, within a limited sum.

It may, therefore, be taken for granted, that whether syphilitic diseases had existed before, or not, they prevailed to a very alarming extent throughout Europe at the close of the fifteenth century. The diagnosis of the "French Disease," given by medical authorities of the time, is still extant. The patients were in low spirits, and broken down; their faces were pale. Most of them had chancres upon the organs of generation. These were obstinate; when cured in one place, they reappeared in another; and the work was never ended. Pustules, with a hard surface, appeared upon the skin, generally on the head first, etc.

Early diagnosis.

But we will not give the loathsome details, which would answer for a modern description. It is a curious historical fact, that the faculty, strangely misapprehending its duties, refused to treat patients assailed by this new plague. They were left to the tender mercies of quacks, barbers, and old women. About the beginning of the sixteenth century, however, the extent of the mischief provoked sympathy from the physicians, and one or two treatises appeared on the subject. Sudorifics seem to have been the chief agents employed. Large use was made of holy-wood (the wood of the lignum-vitæ tree), which was imported from America for the purpose. In was doses of holy-wood, in decoction, which are said to have saved the life of the great Erasmus. A house of reception was established in Paris, for the victims of the new disease, but no

attempt was made to treat them. They were left to die, or to quack themselves.

Les grands veroles.

In 1505, a hospital was ordered to be built in Paris for persons attacked by "large pox" (les grands veroles), as it was called; but it was not built. Thirty years after, victims were still left to rot and die in the streets. In 1535, a small hospital was built in Paris for syphilitic patients and persons suffering from itch, epilepsy, and St. Vitus's Dance. But it was a failure; and for a century and a quarter, persons attacked by venereal diseases were left to the care of Providence, and looked upon as accursed. Finally, a hospital for such was got into operation; but in obedience to the law of its foundation, persons were soundly whipped when they entered it and when they left it, by way of punishing them for having contracted the disease. In the middle of the seventeenth century, a hospital-prison, named the Salpetriere, was established for courtesans; but it was closed against the poor victims of syphilis, and physicians were directed to examine all women who showed symptoms of syphilis on the face. Such was the barbarity of those "good old" times. The condition of the French venereal hospitals continued, up to nearly the close of the eighteenth century, too abominable to be described. Infected prostitutes were mixed with poor, innocent women, who had been diseased by their husbands.

La Salpetriere.

A terrible case.

In 1828, the daughter of a professional nurse, residing in the vicinity of Paris, caught syphilis from a child her mother was nursing which had inherited the disease. The girl was sent to the Hospital du Midi for treatment. She found herself thrust among the vilest prostitutes, whose language

shocked her so terribly, that she insisted on leaving the hospital at once. Her request not being granted, the poor girl contrived to get into the yard, and threw herself into a well. She was drowned, and on the autopsy of her body, it was found that she was a virgin. This dreadful incident aroused the public mind, and there was reform in the mode of treatment.

Prostitutes in Paris are now subject to periodical visitations by physicians appointed for the purpose. Statistics show that the proportion of disease to courtesans varies widely in different years. In some years, six out of every hundred courtesans are diseased; in some, only three per cent. January has been found to be the most fatal month; next, August and September; while February, April, May, and July seem seasons in which they are least likely to be infected with disease. This, however, may be wholly due to chance.

When courtesans most liable to infection.

CHAPTER XV.

MISCELLANY.

Youth is the time of love. In the child, there should be an absolute quiescence or inactivity of the sexual organs, because its vital energy is all wanted to build up its frame. But the second period of youth, that of puberty, is a time of excitement, of the most animated life; it is the spring-time of life, as the poet says:—

Youth.

> "In the spring, a fuller crimson comes upon the robin's breast;
> In the spring, the wanton lapwing gets himself another crest;
> In the spring, a livelier iris changes on the burnished dove;
> In the spring, a young man's fancy lightly turns to thoughts of love."

The dangers as well as the powers and delights of this new energy are increased tenfold. If childhood has its sexual temptations, manhood and womanhood have theirs; infinitely harder to overcome, infinitely more ruinous, if yielded to.

A happy marriage.

In a happy marriage, everything conduces to the enjoyment, to well-being, health, and longevity; for life is passed without shocks and agitations; there is a kernel of felicity, around which are collected all the other possible pleasures, and which must soften the misfortunes whereunto humanity is predestined. In an unhappy marriage, when each person is a perpetual cross to each other, everything is anguish, torment, trouble, and disquietude: today,

tomorrow, and always, at each moment, the bitter cup, full to overflowing, approaches and touches the lips. Is there a constitution sufficiently strong, a health sufficiently robust, a soul sufficiently firm, to flatter itself that it can resist such cruel attacks?

Disappointed love.

A writer, speaking of the world's sympathy, says it is frequently given where it is least wanted, and withheld where it is really needed. A special case of this general rule, that the world does not care very nicely to proportion its sympathy to the amount of suffering, is the scanty heed it pays to the woes of parted lovers, whether the separation be effected by the cruel wisdom of parental serpents, or by the changed feelings of one of the cooing doves; under either circumstances, people outside survey the desolation which follows with wonderful self-possession. There is true cynicism in the fun which people make of love's young dream, alike in its prosperous and sombre hour. If all goes well, and the lovers are happy, wicked men laugh at a folly which the future will expose in its full dimensions; while the course of running the reverse of smooth (as Shakespeare says the course of all *true* love runs), they laugh equally at so great a fuss over so small a catastrophe. Yet, to be crossed in love has made good men and women smart very sore before now. Pathologically considered, disappointment in love is often attended with very serious consequences to the health of persons of both sexes, as my professional experience has taught me. In old times, disarded lovers tried to bring back the affections of the objects of their love, by means of what were called philters, which were often composed of poisonous drugs. When we consider the strength of the passion of love, we cannot wonder that it should

produce the most ruinous and tragical consequences when crossed and thwarted. The poet has said, —

——"Mightier far
Than strength of nerve and sinew, or the sway
Of magic, potent over sun and star,
Is love; though oft to agony distrest,
And though his favorite seat be feeble Woman's breast."

The necessity of sexual love.

To have offspring is not to be regarded as a luxury, but as a great primary necessity of health and happiness, of which every man and woman should have a fair share. The ignorance of the necessity of sexual intercourse to the health and virtue of both man and woman, is the most fundamental error in medical and moral philosophy. The hopes of man and woman lie in a nutshell. They are all comprehended in this question of questions — Is it possible to have both food and love? Is it possible that each individual among us can have a due share of food, love, and leisure? Rather than resign love, rather than practice increased sexual abstinence, and so check population, mankind have been willing to submit to the smallest proportion of food and leisure which the human frame could for a season endure. The want of love is so miserable a state of constraint, and, moreover, so destructive to the health of body and mind, that people who have a choice in the matter will rather put up with any evils than endure it. It is curious that young people are allowed to indulge the exercise of all their organs, all their feelings, except those of the most violent — namely, love.

Single life.

In the early days of the Christian church, a single life, both in man and woman, was lauded by the doctors of the church as one of peculiar sanc-

tity, and peculiarly approved by the Deity. But the voice of nature denounces this doctrine most emphatically. For man or woman to lead a life of celibacy, ordinarily, is to do violence to their nature, and to defeat one of the prime ends of their existence. A life of celibacy is cheerless, selfish, and in age, desolate to the last degree. For woman, it is an anxious and aimless existence, indeed; and she is, in her childlessness and loneliness, truly a pitiable object.

Let the affections be engaged, says a writer to the young, and the prospect of marriage occupy the mind. If such betrothal be truthful, and preserved in fidelity, many advantages will be enjoyed. The heart will be kept steady to a single object; the desires will not become vagrant, aimless, and roaming. It is true, these early engagements have their dangers; but they are less than those of an unengaged condition. Hope deferred may sometimes make the heart sick, and the temper sour; but two hearts can only really coalesce and become by early intimacy and conformity with each other. In this country, at least, early marriages are feasible, as well as advisable. At any rate, marriage is better than fornication; than bought embraces, joyless, loveless, unendeared. Of course, I do not advocate the union of two immature persons. By no means. Undoubtedly, the offspring of people fully matured, are alone sure of healthy and perfect frames. There was an old rule among the ancient Germans, that *late* indulgence was best for youth, and left it longest unexhausted. But legitimate love is far more likely to leave youth in man and woman both unexhausted, than illicit.

Early betrothals, and long engagements.

Corpulence, no doubt, causes sexual impotency

in man, and barrenness in woman. Carpenter says there is a certain degree of antagonism between the nutritive and the generative functions, the one set being exercised at the expense of the other. In fact, that excessive corpulence tends to barrenness and impotence, is brought almost daily under my notice. No doubt can exist that abstinence from, or extreme moderation in, fat, butter, milk, cream, bread, potatoes, sugar, and beer, will in one week considerably diminish the weight, and in fat persons, remove many uncomfortable sensations.

Corpulence.

Many a man has, until his marriage, lived a most continent life; so has his wife. But as soon as they are wedded, intercourse is indulged in night after night, neither party having any idea that this is an excess which the system of neither can bear; and which, to the man at least, is simple ruin. The practice is continued till health is impaired, sometimes permanently; and when, at last, obliged to seek medical advice, he or she, or both, are thunderstruck at learning that their sufferings arise from such a cause as this. People often think that connection may be repeated just as regularly, and almost as often, as meals may. Till they are told, the idea never enters their heads, that they have been guilty of great and criminal excess; nor is this to be wondered at, as such a cause of diseases is seldom hinted at by the medical men they consult.

Marriage excesses.

When, in addition to indisposition to cohabitation, which many modest women feel, we find a persistent aversion to it, so strong as to be invincible by habit, or by any amount of kindness on the husband's part, a very painful suspicion may sometimes arise as to the origin of so unconquerable a

frigidity. The following is a case in which these suspicions seemed to be justified by the facts: — A gentleman came to ask my opinion on the cause of want of sexual feeling in his wife. He told me he had been married four years. His wife was about his own age (twenty-seven years), and had had four children; but she evinced no sexual feeling, although a lively, healthy lady, living in the country. I suggested several causes, when he at last asked me if it was possible that a woman might lose sexual feeling from the *same causes as man*. "I have read your former work,* and though you only allude to the subject incidentally, so far as the female sex is concerned, yet, from what I have learned since my marriage, I am led to think that my wife's want of sexual feeling may arise, if such a thing is possible, from self-abuse. She has confessed to me, that at a boarding-school, in perfect ignorance of any injurious effects, she early acquired the habit. This practice still gives her gratification; not so connection, which she views with positive aversion, although it gives her no pain." I told him that medical men, who are consulted about female complaints, have not unfrequently observed cases like that of his wife. It appears that, at last, nothing but the morbid excitement produced by the baneful practice can give any sexual gratification, and that the *natural* stimulus fails to cause any pleasure whatever. A similar phenomenon occurs in men; and this state of things never ceases, as long as self-abuse is practiced. I feared, therefore, that his surmises were correct, and that the lady practiced self-abuse

Solitary vice.

A case in point.

---

* "Science of Life; or, Self-Preservation."

more frequently than she was willing to admit. So ruinous is the practice of solitary vice, both in the one sex and the other, that it is carried on, even in married life, where no excuse can be devised, and comes to be actually preferred to the natural excitement. Venereal excesses engender satiety just as certainly as any other indulgences, and satiety is followed by indifference and disgust. If the unnatural excesses of masturbation take place early in life, before the subjects who commit them have arrived at maturity, it is not surprising that we meet with women whose sexual feelings, if they ever existed, become prematurely worn out. Doubtless, sexual feeling differs largely in different women; yet I may here say, that the same causes which in early life produce abnormal sexual excitement in boys, have similar effects in girls. This tendency may be checked in girls, as in boys, by careful moral education in early life. But, no doubt can exist that hereditary predisposition has much to do with this, besides education and early associations. I have elsewhere alluded to the perils of boarding-schools to girls about the period of puberty; and the conventual life of Catholic countries is known to be fraught with similar dangers.

Another case.

Apropos of this statement, the writer was professionally consulted by an interesting young married lady, whose case resembled that of the lady already cited. She was educated in the convent of ——, in ——, where she learned the practice of the solitary vice, which she now preferred to the embraces of her husband, as she frankly confessed to me. Indeed, she was perfectly frigid during sexual intercourse. Cases of this kind might be multiplied;

but let these two suffice. Masturbation, from its usual name of Onanism, might be supposed to be the peculiar vice of the male sex. But it is not so. Its ravages extend to females also; the flower of whose beauty it withers, producing in them the same melancholy effects, bodily and mentally, physically and morally, that are observed in its male victims. Indeed, that unnatural love between persons of the same sex, which is so seldom found in northern latitudes and among our own race, is not unknown among the female sex. This was known to the ancients by the name of the Lesbian love. Of the effects of masturbation in both sexes, it is impossible to exaggerate the evils.

Ignorance among married people.

It is but seldom that matters pertaining to sexual intercourse are treated of seriously and instructively, with a really virtuous object in view, in books. Nevertheless, ignorance, or false ideas respecting them, has caused much evil and much domestic misery. It is, I believe, generally assumed that *instinct* teaches adults how sexual congress should take place. But from several cases here that have come under my notice, I should say many would be entirely ignorant but for previously incontinent habits, or such notions as they pick up from watching the practice of animals. For instance, a short time ago, I attended a member of ——, who had been married seven years. The marriage had never been consummated; and I believe that the almost incredible ignorance displayed in this case, as to the duties of matrimony, was not in the least assumed.

Unconsummated marriage.

So common is this ignorance, that it is far from seldom that I meet with cases in which the hymen has never been ruptured. I have no doubt that there are many husbands and wives living together, who be-

lieve that everything usual has taken place, although the marriage has never been actually consummated; and that this is far from being the least unfrequent cause of infertility. This ignorance, of what may be called the mechanics of love among the newly-married, often produces disgust and estrangement, and a total extinction of desire. A first failure will sometimes so annihilate men's sexual feelings, that they are never able or anxious to attempt connection a second time. There are cases of amiable men, who carry their consideration for the women they love to such an extent, as to render themselves practically impotent from very dread of inflicting pain. A singularly agreeable, gentlemanly, but very mild-looking man, called on me, saying "that he had been lately married, and had not succeeded in performing his marital duties." I treated him in the usual way, and he got better; but there was still failure, which I perceived was not to be attributed to him alone. After some hesitation, the lady consulted me. I found her one of those pretty, pleasing, but excessively nervous and excitable persons, to be met with from time to time, and in whom the least approach of anything towards the generative organs creates excessive alarm, in consequence of their excessive sensitiveness and nervousness. At first, the mere application of cold water could not be borne; but, after some time, and after a good deal of careful management, an astringent lotion could be used, when the morbid excitability was somewhat reduced, the hymen was found not only entire, but very tough, presenting the appearance of a finger of a kid glove on the stretchers. Division of the hymen, and dilatation of the vagina, at length accustomed the parts to bear contact, and a perma-

Author's experience.

nent cure was effected. I have reason to believe, that cases of supposed impotence arising from this cause, are not uncommon; and cohabitation is not likely to be followed by impregnation when the husband has been previously continent, and his natural disposition renders him particularly unwilling to distress or hurt his wife, while she is in this state of unnatural and morbid sensitiveness. It is not improbable that divorces have taken place before now from such causes as these; particularly, when interfering friends have exaggerated and envenomed the painful difference between the young couple.

Venereal pleasures.

A distinguished French writer has remarked, perhaps with some exaggeration, that if the pleasurable moments, as well as the torments, which attend love, lasted, there would be no human force capable of supporting them; unless our actual condition was changed. In newly-married people, of course, sexual intercourse takes place more frequently than later along; and hence it happens that conception often fails during the first few months of wedlock, when probably the semen of the male contains but few spermatozoa; and, in such cases, it is only when the ardor of first-love has abated, and the spermatozoa have been allowed the time necessary for their full development, that the female becomes impregnated. Nature, however, provides a kind of check upon the too frequent repetition of the act, in the effect which pregnancy produces on the female, and through her upon the male. If the married female conceives every second year, during the nine months that follow conception, she experiences no great sexual excitement. The consequence is, that sex-

ual desire in the male is somewhat diminished, and intercourse takes place but rarely. And, again, while women are suckling, there is usually such a drain on the vital force made by the organs secreting milk, that sexual desire is almost annihilated. Now, as all that we have read and heard tends to prove that a reciprocity of desire is, to a great extent, necessary to excite the male, we must not be surprised if we learn that excesses in fertile married life are comparatively rare; and that sexual feelings in the man become gradually sobered down.

Jeremy Taylor's rules.

The celebrated Jeremy Taylor, in his "Rules for Married Persons, or Matrimonial Chastity," says:—"He is an ill husband that uses his wife as a man treats a harlot, having no other end but pleasure. Concerning which, our best rule is, that although in this, as in eating and drinking, there is an appetite to be satisfied, which cannot be done without pleasing that desire, yet, since that desire and gratification were intended for other ends, they should never be separated from those ends, but always be joined with all or one of them, with a desire of children, or to avoid fornication, or to lighten and ease the cares and sadnesses of household affairs, or to endear each other; but never with a purpose, either in act or desire, to separate the sensuality from those ends which justify it." Nuptial love, says Lord Bacon, maketh mankind; friendly love perfecteth it, but wanton love corrupteth and embaseth it. The poet Chaucer says, in his quaint old English, "For three things, a man and his wife may fleshly assemble (come together). The first is, in intent of engendure of children for the service of God; for, certes that

is the cause final of matrimony. The second cause is, to yield every of them his debt unto other of his body; for neither of them has power of his own body. The third is, to eschew lechery and villainy.

The ill assortment of rich old dotards with young girl-wives, is in every way loathsome and reprehensible. Nature avenges herself by spreading scandals, doubts about paternity, and domestic troubles; everything is at variance, — age, disposition, character, tastes, amusements. "What shall I do with him, and what will he do with me?" said a clever young girl of eighteen, whose parents wished her to marry an old gentleman. With regard to health and vital force, it is easy to see what will become of them in these unequal marriages, where a young, fresh girl is "flesh of the flesh" of a man used up from age, and mayhap from excesses. Evidently, she commits a suicidal act, more or less rapid or certain. Would you, inquires a French writer, know the difference between love in youth, and in old men? It is this: "of a truth, great strength appertaineth to the first love; and great feebleness to the last." January and May.

The famous writer in the *Saturday Review*, an English journal, who has made himself so notorious by his severe strictures on "Modern Women," says that the first purpose of dress is, or should be, decency; and for this, quantity rather than quality is looked for. But, as with the little cloud, no bigger than a man's hand, so, from the primary fig-leaf, or first element of dress, how great things have arisen. Another perfectly legitimate object of dress is attractiveness. We have a right to suppose that women do not adopt a fashion Costume and morals.

or a costume, unless they suppose that it will add to their attractions in general, and possibly, also, please men in particular.

Sexual attraction.

The devices, so to speak, which nature employs to bring the sexes together, are among the most interesting facts of zoology. No one can fail to notice the wonderful design evinced in bringing the sexes together by means of a phosphorescent light, as is the case with luminous insects. The glow-worm is an animal resembling a caterpillar; its light proceeds from a pale-colored patch, that terminates the under-side of the abdomen. It is, indeed, the perfect female of a winged beetle, from which it is altogether so different, that nothing but actual observation could have inferred the fact of their being the different sexes of the same insect. The object of this light appears to be to attract the male, since it is most brilliant in the female; and in some species, if not all, is present only in the season when the sexes are destined to meet, and strikingly more vivid at the very moment when the meeting takes place. The torch which the wingless female, doomed to crawl upon the grass, lights up at the approach of night, is a beacon which unerringly guides the vagrant male to her "lone illumined form," however obscure the place of her abode.

Phosphorescent.

The duties of marriage.

As I have advised continence for the young and unmarried, so not the less urgently would I impress on the married, the duty, for their own sakes, of moderation in sexual indulgence. None, perhaps, but medical men can know at all (and they can know but a fraction), of the misery and suffering caused by ill-regulated desires and extravagant indulgences among married people. Antiquity was

sensible of the expediency of regulating to some extent these indulgences. Many ordinances existed among ancient nations, of which I give a few extracts. The Jews would have the conjugal debt paid regularly by the husband, in proportion to the energy used in his avocation. According to the Mischna, a man was allowed one or two week's leave of absence, on the score of a religious vow of abstinence. Solon required three payments a month, without reference to the husband's avocations; Mottray states, in his "Travels," that the Turkish law obliges husbands to cohabit with their wives once a week; and that, if they neglect to do so, the wife can lodge a complaint before a magistrate. My opinion is, that sexual congress ought not to take place more frequently than once in seven or ten days; and when my opinion is asked by patients whose desires are naturally strong, I advise those wishing to control their passions, to indulge in intercourse twice in the same night. I have noticed that a single intercourse, in many persons, does not effectually empty the vas deferens, and that within the next twenty-four hours, strong sexual feelings again arise; whereas, if sexual intercourse is repeated the same night, the patient is able so to restrain his feelings, that ten days or a fortnight may elapse without the recurrence of desire.

CHAPTER XVI.

SEXUAL LOVE.

Object of sexual love.

It is through the very intensity of sexual love that the continuation of the race is secured. The lovers, in seeking a mere temporary gratification of an imperious desire, are nature's agents for the propagation of the species. The Jewish scriptures denounce all sexual intercourse, which does nothing more than gratify the sexual craving, as a sin against God. Under the head of Onanism, they so denounce it. The Roman-Catholic Church, also, stigmatizes all fruitless intercourse which accomplishes nothing but the gratification of the sexual appetite, as sinful. It is through that tremendous agency, the confessional, that the Catholic church frowns upon the love-act, which is fruitless, as sinful. The same church, also, declares a life of celibacy, or a single life, as peculiarly meritorious and virtuous. The nun and the monk have been among the foremost figures in that church, and her clergy are forbidden to marry.

The Jewish scriptures.

Fruitless love and the Catholic church.

I do not propose to enter into any theological discussion, but I find the above facts in my way in discussing the *morale* of sexual love and intercourse between the sexes. When the first human pair was bidden to increase and multiply, and through them all their descendants were bidden to do the same thing, doubtless, they were to do it

under proper restrictions and qualifications. A man and a woman in absolute poverty should not beget children; because, to do so would be to increase the sum-total of human misery. A man and woman, who are both radically diseased and tainted in their blood, should not beget children, because they would be merely bringing into the world poor, short-lived creatures, certain to endure constant pain and die early.

Wrong to propagate misery.

What is the fact in regard to the sexual appetite? It is natural, and not, unless abused, sinful. It demands gratification, in the case of healthy human beings of both sexes, as soon as they reach the age of reproduction. If not gratified legitimately, like every other strong, overmastering appetite implanted in our nature, it becomes a curse and a plague, or tends to become such. When nature wants to make sure of attaining a certain end, she always overshoots the mark; that is, to keep the living races agoing, she enables each healthy pair to produce more offspring than is necessary. A healthy man could, if each impulse of the sexual appetite in him could be gratified, and his sperm each time fertilize the germinal vesicle in a female, beget a small army of children. Where polygamy exists, we know to what extent a single male is capable of propagating his species. Some of our Mormon patriarchs are exemplifying the virile power in our own Christian borders. There is an excess of sexual power lodged in each healthy member of a given species, in order to make it sure that the species will not die out, but be kept up. The fertility of some of the lower species of animals is absolutely appalling. A single queen-bee keeps up a swarm; and the spawn of a single cod-

The sexual appetite demands gratification.

Nature's cunning.

Excess of sexual power.

Fertility of lower animals.

fish would soon replenish the ocean, if all the rest were annihilated at a given moment. In prosperous times, when food is abundant, and the means of livelihood are easily obtained, the number of marriages will be increased, and the population also. I wish to show from these facts, that while the begetting of children may not always be proper or right, from prudential and other motives, the sexual passion in healthy men and women, both during the vigorous and reproductive period of life, is always in excess, or capable of more than accomplishing the mere continuance of the race; and that nature, and the Author of nature, intended it should be, that the human race might not fail from the earth. The fair inference from this state of things is, that the proper and reasonable gratification of the sexual propensity is allowable merely as an end in itself, and is not sinful, because it stops short of fruit.

A fair inference.

Enforced celibacy, or an attempt to suppress the natural appetite, has often broken out in crimes the most appalling. The solitary system of confinement in vogue in the Philadelphia Penitentiary, makes that institution a nest of solitary vice.

A living English philosopher maintains that married couples have a right to decide whether their circumstances will admit of their having children, or not. They have no right to fulfil the primitive, divine command, in absolute poverty.

They must exercise their reason in this matter, as in everything else. It is a prudential, as well as a moral question. The purlieus of our great cities are overrun with wretched, human starvelings, and juvenile criminals, without hope or prospects; because their parents were without

intelligence and foresight, and blindly obeyed the impulses of nature like beasts, without discourse of reason. Theologians may decry a fruitless gratification of the sexual appetite as among the sins which incur a special curse from heaven, but with the diffusion of intelligence and civilization, married people will consider their circumstances in bringing progeny into the world; will take into account their own health and ability to properly support children, before begetting them. Neither will they deny themselves a temperate gratification of the impulses of nature, even if they are not able safely to bear or properly support offspring.

In view of the above facts, a knowledge of the modes in which sexual intercourse may be indulged in, without causing conception, will be availed of; and, in view of the above facts, prevention is not regarded as a crime, while induced abortion is one of the worst in the criminal calendar. Nature herself shows her displeasure at the production of puny, congenitally feeble children, by speedily suppressing them. Circumstances do and will control the increase of population, whether or no. If children are begotten and are born in defiance of circumstances, and the laws of health, and other conditions necessary for their successful rearing and growth, they are simply born to misery and crime, or to speedy death.

Prevention; when proper.

This is the scientific modern doctrine; the rational, rather than the theological, view of the subject. The old Romans encouraged child-bearing, because they were constantly at war, and each new child was wanted as food for the sword. Military governments have always, both in ancient and modern times, been especially favorable to

Why the old Romans encouraged child-bearing.

the increase of families, in order that conscripts to fill their armies might not fail. The first Napoleon praised fruitful women, because he wanted unlimited food for powder, in the shape of vigorous young men.

While ignorant, low populations increase and multiply, without regard to the future, or to their circumstances, — populations on a more elevated social plane do not increase so fast. The great English manufacturers encourage the increase of population among the lower orders, because they are thereby furnished with cheap laborers, who fill their coffers, and lead miserable, filthy, debauched lives. In seasons of industrial depression, the English *proletaires* are decimated by starvation and misery. Every human being that is born into the world, ought, at least, to be born to a fair chance in the lottery of life; but he cannot be in an old community, where the sexual appetite is gratified, without foresight or regard for the welfare of the children begotten.

CHAPTER XVII.

THE CHANGE OF LIFE.

A delicate period.

The period of the final cessation of the monthly turns exhibits a less flattering, and oftentimes a no less stormy prospect than that of their first appearance. Compelled to yield to the power of time, women now cease to exist as for the species, and henceforward live only for themselves. Their features are stamped with the impress of age, and their organs of generation are sealed up with the signet of barrenness. This great revolution, this remarkable epoch of life, which most commonly happens between the age of forty and fifty years, but which is subordinate to the influences of climate, constitution, and mode of life; to the social position, and the healthful or diseased condition of the patient, requires such care and precautions, of a hygienic nature, as may serve, as far as possible, to prevent the evils to which women are then known to be liable.

Quack medicines to be avoided.

The first advice they ought to receive at this critical period, is, to reject all sorts of drugs and nostrums, to which are attached such titles as health-pills, elixir of long life, and all the recipes that are loudly proclaimed by ignorance, puffed by quackery and old-womanism, and recommended by popularity and by millions of pretended cures, each certified by a long list of grateful beneficia-

Plain diet recommended.

ries. At the approach of the critical period, any excesses or indulgences in the matter of diet, bodily exercise, dress, sleep, and watching, or in the emotions and passions, are sure to be attended with serious consequences. The diet ought not to be too nutritious, and may be composed of white meats, veal, chicken, fresh-water fish; vegetables, such as succory, spinach; deciduous fruits, cooked and raw fruits, very ripe. A woman arrived at the critical period, should reject all sorts of spiced dishes, ragouts, black and salted meats, coffee, tea, spirituous liquors, and in fine, all stimulating and indigestible food. Women of a full habit, who are subject to copious discharges during the catamenial flow, should renounce late suppers, should drink whey, cooling beverages, infusions with succory, and acidulous mineral waters.

Importance of moderate exercise.

All women, at the period of life in question, ought to make it a rule to take moderate exercise, with a view to distribute throughout the system the excitability which is withdrawn from the organs of generation by the cessation of the monthly discharge. Exercise taken in attending to household affairs is so much the more favorable, as it is proportioned to the physical strength, and superadds to the natural effects of toil, the internal satisfaction arising from the fulfilment of duty. Lastly, riding out in the country, where one may go to inhale the bracing air of the morning; the cares demanded for the proper culture of flowers; short excursions into pleasant regions of country, where the land is high and dry, especially in agreeable company, — also constitute the kinds of exercise from which may be derived the happiest results.

Women who have reached their critical period of

life, should, with more than usual care, withdraw themselves from the influences of sudden changes of the atmosphere, and especially from that of a cold, damp atmosphere, which often gives rise to catarrhal disorders, whites, etc. They would also do well to avoid, particularly at those times when they used to have their monthly turns, — they would do well to avoid, I say, — large assemblies, theatres, heated, close rooms, where only impure air can be breathed; they ought not to sleep upon feather beds, nor in any bed that is too soft and too warm, for such are attended with the disadvantage of promoting fulness of habit, and disposing the system to attacks of bleeding of the womb; of causing costiveness, and exciting the organs of generation, which should henceforth be left, as far as possible, in a state of inaction. Sleep, if prolonged beyond six or seven hours; long watchings; too much exercise of the mental faculties; feelings, whether too deep or too keen; anger; love of play; and all sorts of passionate feeling, — these are especially hurtful to a woman who has ceased to have her monthly turns.

Should avoid crowds and feather beds.

Love, a sentiment so gentle and natural to the female, — a passion which is, so to speak, the sole dominant passion of the sex, — may, at the critical age, produce the greatest disturbance in the nervous system. On this account, sexual intercourse cannot be too moderate at this period of life, and should, in case of the appearance of any signs, be entirely discontinued. Under such circumstances, it is the dictate of prudence to avoid all such circumstances as might tend to awaken any amorous thoughts in the mind, and reawaken a venereal feeling, that ought rather to become extinct; such

The venereal act to be discontinued.

as the spectacle of lascivious pictures and figure; the reading of love-tales; and, in short, everything calculated to cause regret for charms that are fled, and enjoyments that are ended forever.

Most women exaggerate to themselves the dangers of the critical age, representing the future in the most gloomy colors. They should be reassured on this point, and disabused of the false idea they generally form, that their monthly turns are designed to purge the body of some poison or impurity; and that the cessation of the flow is about to become the source of numerous disorders. They should be reminded, that when this short period is once fairly past, their sex has a far better chance of a long life than the other. The persons who live with them ought to turn aside their sad thoughts, and seek, indeed, to inspire them with more pleasant affections. Assisted by the counsels of medicine and of friendship combined, and arming themselves with courage for the conflict, the sex may hope to spend many happy days far beyond an age at which they suppose there is no further happiness for them. How great soever may be the advantages of the measures which I have just proposed, the health of many women still demands the vigorous observation of various precautions, and the employment of certain remedies; among which may be reckoned bleeding, issues, baths, and purgative medicines. Bleeding is recommended, on account of the fulness which is likely to follow the stoppage of the monthly discharge. Recourse should be had to it at an early period, and it should be repeated from time to time, and at intervals, greater or less, according to circumstances. Bleeding at the arm is always to be preferred. Bleeding in the foot ought not to

This period passed, prospect of a long life.

Active remedies necessary.

be resorted to in these cases; nor should leeches be applied to the vulva and thighs. This last method of taking away blood tends to increase the local irritation and fulness, which it is so desirable to remove. However, there are cases, very rare ones, in which leeches may be applied with advantage; such are the cases, when the lower belly and the pelvic viscera are afflicted with acute pain, in which bleeding at the arm, several times repeated, has afforded no relief. Costiveness ought to be combated by the use of injections, sweetened with honey, or prepared with the addition of a teaspoonful of olive oil. The use of the plunge-bath, and of gentle laxatives, such as sedlitz water, ptisans with prunes, tamarind whey, veal broth or vegetable broth, infusion of wild succory, and other drinks of the same sort, containing a weak infusion of sulphate of soda, — are means that may be employed with advantage to the patient. Drastic cathartics, especially purgatives of aloes, ought always to be rejected, for they excite the viscera of the pelvis, especially the womb and the rectum, too much. For similar reasons, I invariably forbid purgative injections, as well as hip-baths; nor do I recommend recourse to common injections, without care in the employment of them; and only in cases of absolute necessity. Those women who in early life may have been subject to swellings of the joints, to ophthalmias, and cutaneous eruptions; and those, lastly, who happen to labor under chronic or mucous inflammation, etc., — will be benefited by an issue, and especially by a blister. The latter is preferable to the former, because it acts upon a more extended surface, and the irritation caused by it may be increased or diminished.

Early infractions of the laws of health punished at this time.

Let me close by remarking, that the cessation of the monthly turns, which is a physiological phenomenon, as natural as their first appearance, would almost always terminate well, were it not that former excesses, careless dieting, and a treatment not unfrequently foreign to the principles of the art, oppose its progress. I cannot, therefore, too loudly proclaim to the sex, that infractions of the laws of health may lead them into the arms of death at a period which should have been for them the commencement of a more tranquil life, and an existence exposed to much fewer dangers.

CHAPTER XVIII.

THE SEXUAL FEELING IN WOMAN.

There is so much ignorance on the subject, and so many false ideas are current as to woman's sexual condition, which are so productive of mischief, that I need offer no apology for giving here the true state of the case. I have taken pains to obtain and compare abundant evidence upon the subject, and the result of my inquiries, I may briefly epitomize as follows: — I should say that the majority of women (happily for them) are not very much troubled with sexual feeling of any kind. What men are habitually, women are only exceptionally. It is too true, I admit, that there are some few women who have sexual desires so strong, that they surpass those of men, and shock public feeling by their exhibition. I admit, of course, the existence of sexual excitement, terminating even in nymphomania, a form of insanity that those accustomed to visit lunatic asylums must be fully conversant with. (And here, let me remark in passing, that this malady will be found discussed in another part of the volume.) But, with these said exceptions, there can be no doubt that sexual feeling in the female, is, in a majority of cases, in abeyance, and that it requires positive and considerable excitement to be roused at all; and, even if roused (which in many instances it never can be),

The sexual feeling in the female in abeyance.

Moderate, compared with that of the male.

is very moderate, compared with that of the male. Many men, and particularly young men, form their ideas of woman's feelings from what they notice early in life among loose, or, at least, low and vulgar women.

There is always a certain number of females, who, though not ostensibly in the ranks of prostitution, make a kind of trade of a pretty face. They are fond of admiration; they like to attract the attention of males. Any susceptible boy is easily led to believe, whether he is altogether overcome by the syren or not, that she, and, therefore, all women, must have, at least, as strong passions as himself. Such women, however, give a very false idea of the condition of female sexual feeling in general. Association with loose women (who, if they have not sexual feeling, counterfeit it so well, that the novice does not suspect but that it is genuine), seems to corroborate such an impression; and it is from such erroneous impressions that so many young men think that the marital duties they will have to undertake are beyond their exhausted strength, and from this reason dread and avoid marriage. Married men — medical men — or married women themselves, would, if appealed to, tell a very different tale, and vindicate female nature from the vile aspersions cast on it by the abandoned conduct and ungoverned lusts of a few of its worst examples. There are many females who never felt any sexual desire whatever. Others, again, immediately after each period, do become, to a limited degree, capable of experiencing it; but this capacity is often temporary, and will cease entirely till the next menstrual period. The best mothers, wives, and managers of households,

Loose women counterfeit sexual feeling.

A vile aspersion.

know little or nothing of sexual indulgences. Love of home, children, and domestic duties, are the only passions they feel. As a general rule, a modest woman seldom desires any sexual gratification for herself. She submits to her husband, but only to please him; and, but for the desire of maternity, would far rather be relieved from his attentions. The married woman has no wish to be treated on the footing of a mistress.

A modest woman.

One instance may better illustrate the state of the case, than much description. In 186–, a gentleman, about thirty years of age, came to me on account of sexual debility. On cross-examination, I found he had been married a twelvemonth, and that connection had taken place but once since the commencement of the year, and that there was some doubt as to the completion of the act then. He brought his wife with him, as she was, he said, desirous of having some conversation with me. I found the lady a refined and highly sensitive person. Speaking with a freedom as far removed from assurance as false delicacy, she told me she thought it her duty to consult me. She neither blushed nor faltered in telling her story; and I regret that my words must fail to convey the delicacy with which her avowal was made.

Author's experience.

Her husband and herself, she said, had been acquainted since childhood, had grown up together, became mutually attached, and married. She believed him debilitated, but, as she was fully convinced, from no indiscreet act on his part. She believed it was his natural condition. She was dotingly attached to him, and would not have determined to consult me, but that she wished, for his sake, to have a family, as it would, she hoped,

conduce to their mutual happiness. She assured me that she felt no sexual passions whatever; that, if she was capable of them, they were dormant. Her passion for her husband was of a Platonic kind; and far from wishing to stimulate his frigid feelings, she doubted whether it would be right or not. She loved him as he was, and would not desire him to be otherwise, except for the hope of having a child.

Positive repugnance to cohabitation.

I believe this lady is a perfect ideal of a true wife and mother; kind, considerate, self-sacrificing, and sensible; so pure-hearted, as to be utterly ignorant of and averse to any sexual indulgence; but so unselfishly attached to the man she loves, as to be willing to give up her own wishes and feelings for his sake.

A great contrast to the unselfish sacrifices such women make of their feelings in allowing cohabitation is offered by others, who, either from ignorance or utter want of sympathy, — although they are model wives in every other respect, — not only evince no sexual feeling, but, on the contrary, scruple not to declare their aversion to the least manifestation of it. Doubtless this may, and often does, depend upon disease; and if so, the sooner the suffering female is treated, the better.

Much more frequently, however, it depends upon apathy, selfish indifference to please, or unwillingness to overcome the natural repugnance which such females feel for cohabitation.

We offer, I think, no apology for light conduct, when we admit that there are some few women who, like men, in consequence of hereditary predisposition, or ill-directed moral education, find it difficult to restrain their passions; while their more

fortunate sisters have never been tempted; and have, therefore, never fallen.

This, however, does not alter the fact, which I again would venture to impress on the reader, that, in general, women do not feel any great sexual tendencies. The unfortunately large numbers whose lives would seem to prove the contrary are to be accounted for on much more mercenary motives. Vanity, giddiness, greediness, love of dress, distress, hunger, make women prostitutes; but do not induce female profligacy so largely as has been supposed.

CHAPTER XIX.

PREVENTION OF CONCEPTION.

Author's experience.

On the subject of prevention, I will now give such advice as a most extensive experience qualifies me to give. Thousands of women have written me, ladies resident in almost all the States of the Union, detailing to me in heart-rending terms the wretchedness of their situation, owing to compulsory childbirth, which was undermining their constitutions, and conducting them to premature graves. They were anxious to be advised, so as to escape the inevitable doom before them.

Such appeals are of a nature not to be resisted by the skilful practitioner, who feels that he can afford relief; and that relief, under such circumstances, is what the sufferers are entitled to.

A mooted question.

One of the mooted questions of physiology, is, whether there are not times, in the interval between the catamenial discharges, when intercourse may take place with impunity, because the woman is not liable to impregnation; because there is no ovulation or emission from the ovaries of the germ-cell or vesicle, which, when fertilized by the sperm from the male, causes conception or fecundation.

Dunglison's opinion.

On this important subject, Dunglison says: — "By many modern writers, on the ovular theory of menstruation, it is maintained that a period of about eight days is needed for the passage of the unim-

pregnated ovum, or egg, from the ovarium to the womb, and its discharge from the female." M. Ponchet, however (a French writer on the theory of ovulation), — according to whose "tenth fundamental law," in the human species and the mammalia, the egg and the seed from the male meet normally in the womb, or in the portion of the Fallopian tubes near it; and there fecundation is accomplished, — extends the time much beyond this. His view is, that in the human species, a vesicle of De Graaf (the discoverer of it) is torn normally at each menstruation (or monthly turn), which spontaneously discharges its contained ovule, or little egg, either immediately afterwards, or within the first four days following. A period of from two to six days is generally required for it to clear the tube; and it is subsequently retained in the womb, for from two to six days, by the decidua. "If," he adds, "during the time of its passage and sojourn in the genital apparatus, that is, during the first twelve days that follow the monthly turns, and rarely up to the fourteenth day, there is sexual intercourse, conception may take place; *but it never can be effected at a later period, because the egg must inevitably have been dragged out by the discharge.*

But, on the other hand, it is an overwhelming objection to this doctrine, that a woman cannot be impregnated after the twelfth or fourteenth day following her menses, that the Jewish women are bound to observe abstinence from sexual intercourse for eight days; and it is affirmed, that it is the custom among Jews who are scrupulous, for the wife to retire from the society of her husband

Practice of Jewish women.

for a period of thirteen days, reckoning from the first day of being "nyddar," or unclean; that is to say,—by those who are strict,—five days are kept, as prescribed by the Rabbinical law (for the purpose of making surety doubly sure), in addition to the eight days enforced by Moses, and it is added, as a fact, that in general among this singular people, no female is bound to be a mother before at least nine calendar months and a half have elapsed; whence it is inferred, that pregnancy must have taken place immediately *before* the monthly turns.

How fatal is this fact, especially when it is borne in mind that the Jewish women are celebrated for being prolific mothers, and consider it a disgrace not to bear children; how fatal is this fact, I say, to the doctrine that intercourse is *safe* after twelve or fourteen days after the monthly turns have taken place. I can assure my lady readers, that to act upon this doctrine will be dangerous; that is, if they wish to avoid pregnancy. One single authentic case against it would be enough to disprove it, and I have known multitudes of such cases in my practice. In one instance, the last menstruation occurred the eighteenth of October; and the intercourse which resulted in pregnancy, took place on the tenth of November, or *twenty-three* days afterwards. In fact, there is not in the whole month a single moment in which a woman may not find herself with child after having indulged in the venereal act.

A dangerous doctrine.

An instance.

Pregnancy, involuntary or against the will.

How and when conception takes place, are still disputed questions among physiologists and medical authorities. Women become pregnant unconsciously, or even against their wills, and when

the act of copulation fills them with disgust. Pregnancy, as is well known, is the result of copulation, or the union of the two sexes.

It is not owing to the contact of the male sperm, for it frequently occurs before or after emission by the male, but it is dependent upon some inappreciable modification in the female organs — in the ovaries, or the Fallopian tubes, it is supposed by some physiologists. After the kind of convulsive excitement into which the female is thrown, a sensation of languor and debility is experienced, as in the male, but not to the same extent; and, in consequence of no spermatic emission taking place in her, she is capable of a renewal of intercourse more speedily, and can better support its frequent repetition. A mixture having, in this manner, been effected between the materials furnished by the male and female, after a fecundating copulation, *conception* or *fecundation* results, and the rudiments of the new being are immediately constituted. This is all we really know of the matter. As to the nature of the sperm and germ, out of whose commingling life is the result, we know nothing. Fecundation.

Animals have seasons of heat, in which they can only propagate their species. To man and woman, as rational creatures, it is given to beget children at will; to have them, or not, as they please. A woman in ill health, or really disinclined, is not bound to bear children. Some women, with strong wills, can resist impregnation by a muscular effort. I do not advise a resort to abortion, by no means. *Prevention* is the proper remedy in all such cases, and is perfectly justifiable; for prevention is innocent.

CHAPTER XX.

DRESS, CLEANLINESS, COSMETICS.

Dress; fallen decency.

I shall discuss dress, not from the milliners' stand-point, but hygienically. An eccentric, but original writer, has called clothing, or dress, "fallen decency." While the lower animals are provided with an unalterable vestment in which they enter into life, man is cast into being, — to weave himself raiment, not only to shield him against the weather, but to suit his fancy and answer the demands of good taste, and his innate love of beauty, variety, and splendor, — raiment made with art and ingenuity, however, out of the raw material everywhere growing about him, whether on the backs of animals or in a vegetable shape. The fig-leaf of Eden may have been the starting-point of dress, the original of all garments worn by men, but textile fabrics must have quickly taken its place.

To quote again, "the art and mystery of clothing is first given in the skin." The materials of our garments tally with its emanations. The linen is the cool and watery envelope of the body; the cotton is the middle, or earthy; woollen and cloth are prolongations of the hair, the unctuous and the oily; silks and satins, with their metalline glow and ocular glancing, stand for the ether and unresting fire, that goes out and in, and changes forever in the eyes and countenance with illusive

lustre. Jewels and ornaments, also, are of the brotherhood of the eyes and face, and make dress into rank and dignity. The costumes of nations, sexes, times, and events, descend from their countenances and skins. White, and scarlet, and Tyrian-purple are but their chromatic refractions. The Persian scarf, the Thibetan wool, England and France, with their stuffs and laces, China, with its cloth of gold, only continue in measured movements the infinite fabric of the weaving corium.

Inasmuch as there is attached to our clothing the precious advantage of guarding the body from the immediate impression of the atmosphere, and thus of annulling, to a certain extent, the influence of atmospheric vicissitudes, it is very important that all parts of the female dress should be constructed with reference to their manner of life, the circumstances in which they are placed, and the prevailing temperature of the air. In winter, they should wear woollen stuffs, or silk stuffs, wadded, or doubled, which, while they are both supple and light, yet keep up a good degree of warmth about the person, from their being bad conductors of caloric. Although furs are possessed of the same property, they are inconvenient, because, upon leaving them off merely for a short time, the person becomes sensible to the slightest cold. In summer, they should make use of linen; whereas in the fall and spring, the variableness of the season requires the use of dresses that are moderately warm. Lastly, at all seasons of the year, females ought not, without great care, to lessen the number of their garments, or suddenly change them for others less preservative against sudden changes of the weather. It is equally important for them, at all times and

Female dress; its construction.

In winter.

Furs, too warm.

Fall and spring clothing.

Sudden changes of garments.

seasons, to keep the bosom and the arms covered, and most especially is it important during the act of menstruation.

Exposure of bosom, etc.

Apropos of undue exposure of the bosom in obedience to the dictates of fashion, a recent writer in an English journal, who is an avowed satirist of modern womankind, says: — "We remember a venerable old lady, whose ideas of decorum were such, that in her speech, all above the foot was ankle, and all below the chin was chest;" but now, the female bosom is less a subject of a revelation than the feature of an exposition; and charms that were once reserved, are now made the common property of every looker-on. A costume, which has been described as consisting of a smock, a waistband, and a frill, seems to exceed the bounds of honest liberality, and resembles most, perhaps, the attire mentioned by Rabelais, "nothing before, and nothing behind, with sleeves of the same." Not very long ago, two gentlemen were standing together at the opera. "Did you ever see anything like that?" inquired one, with a significant glance directing the eye of his companion to the uncovered bust of a lady immediately below. "Not since I was weaned," was the suggestive reply.

Dress of females should be loose.

The form of the female dress also deserves attention. It should always be large enough not to interfere with a perfect freedom of motion, and not to exert a compressing power on any parts of the body; — the corset, especially when badly constructed, or too tight, interferes with the motion of the body, prevents the expansion of the lungs, disposing them to be attacked with inflammation, and in consequence thereof, with consumption. Moreover, they painfully compress the breasts, and

act as causes of cancerous engorgements and indurations. But it is just, however, to state, that while the corset, when too small, too tight, and supplied with strong whalebone and a steel busk, is almost always hurtful; the elastic corset, well fitted to the shape, furnished with ample gussets to receive the breasts, without compressing them, and besides, unprovided with the busk, and moderately tight, lends grace to the figure, and gives a useful support to the bosom; increases the energy of the muscles on the chest and abdomen, and, in fine, obviates a disposition to divide, met with in some of the muscles, and prevents the escape of the abdominal viscera from the cavity of the belly, as well as the deviations of the womb in pregnant and lying-in women. It should be said, furthermore, that a corset, when well made, ought to adapt itself to the hips, and other parts of the body, and not these latter to the corset. Frequent changes of clean linen, and strict attention to cleanliness, deserve the most scrupulous attention of the female.

The corset, a support.

In general, on the subject of female dress, I will say, in the words of another, that there is much greater necessity for the proper and healthful arrangements of the habiliments of the female than of the male, inasmuch as the welfare of offspring is much more dependent upon her than upon the man. The female has the charge, the nourishing before and after birth, and the bringing into the world, the child; and if, by indulgence in foolish habits or fashions of dress, she so deforms her person as to injure the unborn babe, a great sin must ever lie at her door.

Proper arrangement of dress more important to woman than man.

The fashion of dress is in daily fluctuation, and

the ingenuity of the manufacturers is constantly taxed to develope some new phases in its appearance, as an incentive to the devotees to purchase. A medical publication of great weight and authority, said, many years ago, in an article on consumption, "when we reflect upon the insane adherence to fashion in our country, and the total want of that knowledge that would compel precautionary measures, why should it not be so? It is a part of an American female's education to wear tight dresses and thin shoes; she esteems herself, at least, temporarily degraded, if she does not do it." I am happy to say that this is not so much the case now, as at the time the article from which I am quoting was written.

Tight dresses.

Effect on heart and lungs.

"What becomes of the blood — that is, of four or five pounds out of the twenty a female has in her body — when it is driven from her extremities by cold, upon the heart and lungs? These organs struggle to overcome their bonds, and to pass it through the lungs fast enough to preserve the balance of circulation, but they must fail; a dozen powerful hooks and eyes, if not a corset to boot, — and one is just as bad as the other, — resist the efforts of the muscles to raise the ribs, and the delicate blood-vessels lining the bronchia, tender from congestion, give way here and there, and she spits blood. It is merciful she does; it had better come out than remain in the substance of the lungs. The exposure of the neck and chest, so common in the ranks of fashion, is as injurious to the health of the body as to the purity of the soul. Diseases of the throat, the lungs, and the heart, are the necessary consequences; and thousands of the fairest of the fair are annually the victims of consump-

tion from this cause alone. If the lungs have not room enough to play, they will force other organs out of place, in their efforts to obtain it. The heart, deprived of comfortable space for its movements, will palpitate, and be irregular in its action, and diseased in its substance. The stomach will be pressed down out of its place by the superincumbent diaphragm, and the substance of the organ diseased, while its function of digestion will be disturbed. Indeed, the whole viscera of the abdomen will be pressed out of place, and disturbed, more or less.

Digestion interfered with.

There are, however, two parts towards which the pressure occasioned by tight dress is usually most injuriously directed — the womb, and the last portion of the bowels. The cavity in which these organs are placed is covered in with muscles, which are capable of, and intended for contracting and dilating. They resist pressure to a certain extent, but after that, they give way and stretch, losing their elasticity. Is it extraordinary that so many cases of falling of the womb should occur? A fashionable pair of corsets will add to the weight of resistance in the abdomen from ten to thirty pounds; what wonder if something give way? It would be a wonder if something did not. Upon the point of beauty in this matter, we may remark that the laws of beauty are the laws of nature. There is, therefore, no room for the argument, that the beauty of a woman requires this pressure; for this is to pass by unheeded the great principle that we are to learn from Nature, not teach her. A *fashionable* woman cannot have her maternal organs in a state of health; and therefore, all the functions appertaining to those modes

Falling of the womb.

Fashionable dress, and the organs of maternity.

of existence will necessarily be accompanied with inconvenience and pain.

The functions of gestation, parturition, and lactation, are performed with debilitated and diseased organs; and from the necessity of the case, must be disordered and disturbed. Says Combe, "Female dress errs in one important particular, even when unexceptionable in material and quality. From the tightness with which it is made to fit on the upper part of the body, not only is the insensible perspiration injudiciously and hurtfully confined, but that free play between the dress and the skin, which is so beneficial in gently stimulating the latter by friction at every movement of the body, is altogether together prevented, and the action of the cutaneous nerves and vessels, and consequently the heat generated is less than that which would result from the same dress more loosely worn."

Combe's opinion.

The following remarks on female dress are selected from writings of distinguished ladies, and show hygienical knowledge as well as good taste. An uncomfortable dress is never tasteful. Dress is always to be considered as secondary to the person. Mrs. E. Oakes Smith says, the greatest compliment that can be paid to a woman, is to forget her dress, or rather not to see it, proving it to be so characteristic, that we are not incommoded by observation, and are thus left to unalloyed companionship. We see, as it were, face to face, and not through starch and whalebone.

Quotations from distinguished female writers.

From the earliest times, difference of sex has implied difference of costume. Drapery has ever appropriately veiled the form of woman; and a flowing garment, health, decency, and modesty, all alike, point out this style of dress for woman.

Drapery appropriate to woman.

Woman, says an eccentric, brilliant, and now deceased lady-writer, may take a lesson on dress, from the garments which nature puts on at the various seasons of the year.

In the spring of youth, when all is lively and gay, the light and transparent robes of brilliant colors may appropriately adorn the limbs of beauty. Especially if the maid possesses the airy form of a Hebe, a lightly flowing drapery is best suited to display her charms. This simple garb leaves to beauty all her empire. No heavy ornaments should load the figure, or distract the attention in its admiration of the lovely outlines. The young woman of graver mien should select her apparel with reference to style of beauty. Her robes should always be long and more ample than those of her gayer sisters; and they should also be thicker in substance, and of a more sober color. Nothing can be more revolting than age, tricked out in the gay robes of youth, with false tresses and all the other artificial and factitious devices to hide the breaches of time.

Brilliant colors for youth.

Costumes for different styles of beauty.

False tresses in age.

The female ought to take a tepid bath at least once a month; the effect of it being to cleanse the skin, render it supple, promote the peripheral circulation, excite perspiration, and thus assist nature in one of her proposed ends. The temperature of the bath ought to be so adjusted as to excite a sensation neither of heat nor of cold; it should simply be agreeable.

Tepid baths beneficial.

The last is always to be preferred to that of the thermometer; which, although it indicates the temperature of the water, yet does not indicate what may happen to suit the state of the bather. River or sea bathing in the summer season most

Hip-baths.

generally agrees with the constitution of the sex; but hip-baths, which tend to produce a congestion of the pelvic viscera, should always be forbidden, except under some special indication, of which a skilful physician is alone the fitting judge.

Fresh water, as an article of the female toilet.

Among the attentions to cleanliness, I ought to place in the first rank those that refer to the care of the sexual parts. The *only* liquid that a woman ought to use for her toilet at all seasons of the year, except winter, is fresh water. In the winter season, it ought to be tepid; that is, it should be made as warm as it is in the warm season. Very cold water might produce inflammation of the mucous membrane of the vagina and uterus, and thus bring on the whites; whereas the frequent employment of warm water is attended with the risk of relaxing the genital organs, and giving them a disposition to be affected with hemorrhage. Water for injecting the vagina is better than any artificial preparation.

Toilet vinegars, essences, etc., to be avoided.

It is just that I should state, moreover, that all these toilet vinegars, these essences, the astringent compositions, and all those mysterious waters that the perfumers have the talent to produce, under a variety of picturesque titles, should be eschewed by females who attach any importance to the preservation of their health; it is, at the same time, useful for them to know, that certain preparations invented by the corruption of public manners, and which are the occasional resources of libertinism, are positively destructive of morals and good looks both. A desire to please, and to conquer all hearts by her beauty, has, in all countries, and in all ages, been one of the most powerful desires in the female breast. To attain this end, her imagination, fruitful

in inventions of the sort, has suggested to her various means; in the first rank of which is the cosmetic. These articles, which, as their name shows, are designed to embellish the skin, have fallen into the hands of a set of charlatans, who have transformed them into a thousand shapes, more or less prejudicial to the health, "*pour reparer des ans l'irreparable outrage.*" If there are really any cosmetics which are unattended with injurious effects upon the skin, such as the aromatic distilled waters, etc., the greater proportion of them, — especially the different sorts of *rouge*, and among others the red and the white, compounded of metallic preparations, such as lead, mercury, antimony, bismuth, arsenic, etc., etc., — are extremely hurtful; and are, at the present day, wholly abandoned to the use of players, courtesans, and old coquettes. Far from preserving the youthful appearance, these various preparations actually hasten the appearance of old age; they deepen the wrinkles, ruin the skin, arrest the perspiration, bring on tetter of different sorts, pimples, and erysipelas. Some of them may succeed in dispersing spots and some forms of cutaneous eruptions; but a worse thing is sure to follow. Salivation, tremors, palsy, convulsions, painter's colic, diseased eyes, inflammation of the stomach, of the liver and the lungs, have been the miserable consequences produced by the application of various metallic preparations to the skin. Where fresh water, the best and most efficacious of cosmetics, will not suffice to cleanse the skin, or restore its brilliancy and suppleness, — lost by the abuse of pleasures, prolonged vigils, the use of paint, the action of the

Cosmetics; their philosophy.

Mostly hurtful.

A useful lotion.

air and the solar rays, etc., — the ladies may successfully employ a balsamic lotion, prepared by mixing ten drops of balsam of Mecca, a drachm of sugar, the yolk of an egg, and six ounces of distilled rose-water. They might likewise make use of sweet-almond ointment; taking care to get fresh, and without any combination of the metallic salts that certain perfumers are in the habit of mixing with them.

As for the teeth, the tincture of guaiacum, the vinous tincture of bark, and the spirit of cochlearia, are the best dentifrices for the preservation of the mouth. A mixture of water and alcohol, with a few grains of sal-ammoniac, may also be very beneficially employed; and the powder of Peruvian bark, or charcoal, or burnt bread, incorporated with honey, compose an electuary which is very suitable for whitening the teeth, removing the tartar that encrusts them, and thereby preserving them from attacks of caries. The electuary ought to be used at least once a week; and it is right to rinse the mouth after each meal, with cool wine and water; and to do the same thing every morning with water containing a portion of some one of the liquid dentifrices we have mentioned, or merely a little eau de cologne. No one should clean the teeth except with a soft brush; nor should they take cold drinks immediately after taking their food very hot.

Cleaning the teeth.

The cosmetics prepared for the hands, and all the cutaneous surfaces, with a view to their neatness, consist of pastes and flour of sweet and bitter almonds, of fecula, and of aromatic soaps. I think it a duty, however, to say that the most fashionable toilet soaps are but ill suited to preserve the soft-

ness and suppleness of the skin, because they always contain an excess of alkali, which dries and at last cracks it.

Depilatories.

The caustic substances which enter into the composition of depilatories, or preparations for removing hair, should be sufficient motive for rejecting their use; not only may they give rise to serious symptoms, but there is the further objection, that they do not fulfil the end proposed, for the hair which they cause to fall, grows again. All those metallic substances, also, which are used for dyeing the hair, should be banished from a lady's toilet as being very dangerous articles. They mostly consist of nitrate of silver, or a mixture of sulphuret of lead and quick-lime, to be diluted with water at the time of using them. I will add, as to what relates to the care of the hair, that she ought to confine herself to the use of the comb; to wash it from time to time with water; and to detach the dandruff occasionally with a brush; and, lastly, she should treat it with grace, and perfume it occasionally with oil.

Modern Cosmetics.

A sarcastic writer on female costume and its morals, in an English journal, says, our modest matrons meet not to stare the strumpet down, but to compare notes, to get hints, and to engage in a kind of friendly rivalry; in short, to pay that homage to vice, and in a very direct way too, which vice is formerly said to have paid to virtue. Paint and powder are, of course, the first requisites for the end in view; and these adjuncts have to be laid on with much skill. There are pearl-powder, violet-powder, rouge, bistre for the eyelids, belladonna for the eyes, white-lead and black-lead, yellow-dye, and mineral acids for the hair, — all

Belladonna, etc.

tending to the utter destruction of both hair and skin. The effect of this "diaphanous" complexion and "aurified" hair, in a person intended by nature to be dark and swarthy, is most comical.

White-lead. Sometimes the white-lead is used so unsparingly, that it has quite a blue tint, which glistens until the face looks more like a death's-head, anointed with phosphorus and oil for theatrical purposes, than the head of a Christian gentlewoman.

Blue-white visages. It may be interesting to know that the reign of golden locks and blue-white visages is drawing to a close, and that it is to be followed by bronze complexions and blue-black hair, — *a l'Africaine*, we presume. When fashionable madame has, to her own satisfaction, painted and varnished her face, she then proceeds, like Jezebel, to tire her head; and, whether she has much hair or little, she fixes on to the back of it, a huge nest of coarse hair, generally

Baked hair. well-baked, in order to be free from the parasites with which it abounded when it first adorned the person of some Russian or North-German peasant-girl; of course, this gives an unnatural hue.

If this style be not approved, there is yet another fashion; namely, to cut the hair short in a crop, *creper* it, curl it, frizzle it, bleach it, burn it, and otherwise torture it, until it has about as much life in it as last-year's hay; and then to shampoo it, rumple it, and tousle it, until the effect is to produce the aspect of a mad-woman in one of her worst fits.*

What the hair means. A poetical physiologist says that the hair is an appendage of the skin — a prolongation of the cuticle; the grass, as it were, of our skull.

---

*London Saturday Review.

Warmth, clothing, conduction, protection, expression, beauty, — every hair means that all. It is observable that there is an intimate connection between the hair and the temperament, and between the hair and the nervous system, and a sympathy between the hair and the mind in health and disease. The narratives of fear turning the hair white in a single night are well attested. The clustered curls of woman catch and be-net with the same witchery that glitters from her eyes, a fascination from her smile; yea, every state and feeling makes as free with the hair as fear itself. Low-browed self-abasement has a straight-haired head; its very comb puts it down by instinctive logic of correspondence. Courage and energy crisp the hair like wire. Prolific and young-blooded races, like the negro, are woolly as sheep; old and decaying tribes, like our North-American Indians, are lank and drooping in their locks. Life throws the hair as a substantial shadow around the principal organs, to which it offers a native contrast, forming the colored complement of their grace. Whatever shadow is required, comes by this rule: red hair is the contrast in keeping with one complexion, and black hair with another.* I will remind the ladies, that too frequent dressing of the hair with hot curling-tongs dries and makes it early turn gray; the metallic combs cut it, and the various pomatums recommended for improving the growth of the hair have no other effect than to cover it with a coat of grease, consisting, for the most part, of colored tallow, perfumed, and occasionally mixed with oil or beef's marrow. I

Effect of emotions on the hair.

Quotation from Wilkinson, on the hair.

---

* Wilkinson.

will observe, also, that cleanliness and native elegance, the graces of the body, as well as of the mind, and, in fine, good temper and modesty, are the most powerful cosmetics or adorners. A poet has said that real beauty is its own sufficient ornament, and that when unadorned is adorned the most.

The best cosmetics.

I will close this chapter with a quotation on the subject of personal cleanliness, by Wilkinson, the quaint, but brilliant physiologist, whom I have already quoted. "Great," he says, "is the plainness, and equally great the mystery of cleanliness. It is one of those terms that will hardly be chained to a physical sense; we no sooner begin to treat it, than it buds, like Aaron's rod, and blossoms into morals. Frequent ablutions wash away the *sordes* of our bodies, open our pores, enable us to emanate with freedom, and with freedom to take in what the atmosphere can yield us. The model and mirror of these effects is presented in our daily washings, which make us *feel clean*. In washing, an effect is produced which we may term material-psychical, and which every one must have experienced, — a sentiment of new vigor, as though the mind itself were washed in the skin. We do not know 'how we are' in the morning, or what is the promised complexion of our day, until our ablutions have taken place. The result is often quite different from what we feared before these processes were undergone."

The mystery of cleanliness.

Morning ablutions.

This clean feeling is the basis of correct perceptions. It gives us self-respect, establishes a ring of healthy sentiment around us, and between us and other things; and enables us to discriminate between clean and unclean, in whatever seeks to

enter our feelings, or aspires to stay there. In short, it places a cordon of pure life around our bodies, as a troop of angels around the bed and before the path of the faithful. On the other hand, dirt upon the skin is not merely dirt, but dirty feeling; and the latter is no sooner set up than it travels soulwards. The skin is given, among other ends, as a vivacious sentinel, to prevent the entrance into us of whatever is alien and impure. The purity of the sentinel is of the greatest value to this exercise of his functions. Dirty feeling does not know dirt when it comes, but is bribed by it, and lets it pass the barrier. Hence, an unclean skin, besides adulterating the feelings, admits a material adulteration to the organs. Furthermore, by clogging the pores, it prevents the blood from escaping outwards, until at length, the body, crusted over with itself (in the shape of its own sweat), abrogates the skin functions, and finds another and violent eruption in disease. For nobody can stop long in himself; he must go forth as a messenger of life and death to those about him. And when he ceases to transpire health, specific sickness is conceived in the struggle; the system makes new terms between itself and nature; a part of the privileges of life is ceded, and the various maladies appear. This is one class of physical evils, engendered by the neglected cleanliness, not of years alone, but of generations.

CHAPTER XXI.

THE HYSTERICAL MALADY.

Diseases which are of a nervous character partake, more or less, of the mystery which wraps the nervous system. The nerves form the means of union between the mind and body, and their disorders give rise to morbid phenomena of the most extraordinary and abnormal character. Hysterics, hysterical spasm, suffocation of the womb, hysterical vapors, etc., are some of the various names by which this disease has been called. There are various opinions as to the seat of hysteria; some placing it in the uterus, or tracing it to some modification of the uterine system acting sympathetically on the general nervous system. But I have not space to cite merely hypothetical opinions.

The womb, the starting-point of hysteria.

Most physicians of the present day regard the womb as the starting-point of the different phenomena which constitute hysteria. It consists of a lesion of the uterine apparatus, giving rise to paroxysms devoid of fever; which are manifested less by local symptoms, than by a sense of suffocation and strangulation, followed by more or less complete loss of consciousness, and accompanied by convulsive and spasmodic phenomena in the vital organs and those of relation. When the strength of the reproductive force which is implanted in every individual is taken into account, what

The reproductive force.

wonder that its disorders should give rise to strange attacks, especially in the impressionable female system? This great force exists in the ovaries and womb, and there alone, in the female; yet, so influential and diffusive is it, that through the nerves it irradiates every part of the frame. It is a pervading vital force; it is a constitutional sense. There is no other substance amongst the whole system of organs, that enjoys a power equally urgent, when it becomes excited by disease; since, when disordered by whatsoever cause, it becomes capable of carrying confusion into every department, where it may rave and rage in its caprice and fury.

It is not remarkable, then, that disordered and modified states of the reproductive organs may, and indeed do, excite all the wonderful and mysterious phenomena, whether physical, physiological, or psychological, of the hysteric malady.

Predisposing causes of hysteria.

The predisposing causes of hysteria are, hereditary transmission, a feeble constitution, residence in large cities, idleness, an effeminate moral and physical education, exquisite nervous sensibility and ardent temperament. The affection is most common between the period of puberty and the cessation of the menses; though it occurs both before and after these periods. It oftenest attacks girls at the period of puberty; young widows; childless women; those near the change of life; and those who are fat and of a full habit, and in whom the menses are painful and irregular. The exciting causes are the menstrual effort at the period of puberty; suppression of the menses, or their difficult discharge; forced continence; abuse of intercourse; masturbation; and all causes capable of producing irritation of the womb, and especially

of the ovaries. Instinctive sympathy may excite an attack in a spectator of another suffering from the malady. Violent transports of feeling, of anger, fright, violent and sudden disappointment; in fact, all incidents or incentives, that powerfully excite the nerves, may produce it.

Effect of instinctive sympathy.

A case is related of a young girl, who, at a boarding-school, fell into a paroxysm of hysteria in the presence of her companions; soon after, so large a number were attacked with the disease, as to make it necessary to close the school for a considerable period. Such attacks are the mere results of nervous sympathy, of a spasm of the brain, and not of true hysteria, which scarcely ever appears before the age of puberty.

Women subject to hysteria.

Whatever the causes of hysteria, women affected with, or predisposed to the disease, generally exhibit all the signs of a very excitable temperament; they are commonly marked with levity, frivolity, or remarkable obstinacy; they are apt to be capricious and irascible, passing from one extreme of feeling to another; from noisy laughter to tears and sobs, without any apparent cause. Those who are thus really nervously diseased, are truly unfortunate, and deserving of all sympathy; but there are women who feign hysterics to gain their own ends. These latter are the worst of false pretenders.

Symptoms.

The symptoms of hysteria are as variable as the causes which produce them. One writer has said, that hysteria is not a single disease, but a whole cohort of diseases. Sometimes the paroxysm attacks suddenly without warning; but it is generally preceded by some derangement, by feelings of depression and uneasiness; to which may be added yawning, redness of the face, paleness, and

coldness of the extremities, palpitations, numbness and cramps of the limbs, intense headache, a state of sullenness and sadness, accompanied by tears and sighs, which alternate, in certain cases, with immoderate laughter. At the commencement of the spasm, the patient feels a sort of mysterious ball, which, after having performed various circumvolutions in the cavity of the abdomen, ascends chiefly on the left side, towards the stomach and thorax, and following the course of the œsophagus, producing a sense of tightening in the throat, which, in very severe cases, produces a dread of suffocation. When the attack is violent, convulsive movements of the limbs and trunk take place, so violent as to make it difficult for several persons to hold the most delicate woman; who, in spite of the efforts of the assistants, struggles, rolls, and twists herself upon her bed. When not prevented, hysteric patients meet with dreadful falls; strike themselves upon the head, tear out their hair, and forcibly thrust aside any object they meet. The body, which is stiffened, bends forwards, backwards, to the right and left, just as in epilepsy. The jaws are shut; and the eyelids, which cover the whole eyeball, quiver with rapid and continual tremors. Some patients are conscious during the spasms, others for a few moments, and still others are unconscious until the attack is completely over.

In some hysterical women, the senses are more acute than in a state of health. They hear all that is said even in a low tone, and see all that passes around them. Some of these can answer questions, and some can only make signs; but after the attack can describe all they have seen, heard, and felt. Often a period of quiet occurs, which leads

to a belief that the paroxysms are passed; but the patients are seldom deceived. In the severest cases, the patients, from the beginning of the attack, utter piercing, rapid cries, which have something peculiar in them, and which leads us at once to recognize the disease, if we have had any experience with it. After each violent fit, air escapes from the mouth, preceded by noises in the throat, and accompanied by vomiting. The pulse is hurried and painful. The saliva is sometimes slightly frothy. There is noise in the ears, vertigo, confusion, a dazzling sensation of sparks before the eyes, or a kind of thick mist, which sometimes entirely blinds the sight. Most of the patients utter frightful cries and howls, which can be compared only to those of the wolf; they also abandon themselves to immoderate laughter, alternately with sobs and tears.

These last symptoms are not only the forerunners of an attack, but of the end of it. Generally, the patient continues panting and agitated at the slightest noise or shock during the remission of the symptoms. She sometimes remains immovable, as though in a state of ecstacy or somnambulism. When the hysteric paroxysm is exhausted, the patient becomes conscious; she opens her eyes, and utters deep sighs and plaintive moans; the pulse becomes soft and regular; the breathing natural; a moisture breaks on the surface; finally, after the paroxysm, which commonly terminates by involuntary tears, by sardonic laughter, and sometimes by pressing desire to expel urine, which is abundant and limpid, there remains nothing but a sensation of fatigue in the limbs, and a sort of general lassitude and despondency. Sometimes the

The end of the fit.

disorder ceases after a single attack. It is more alarming than dangerous. Persons are astonished to see the most frightful symptoms; and a species of agony, so to speak, give place in a few moments to perfect calm and all the signs of health. When the attacks are of long duration, and especially when the patients remain for a long period immovable, it so much resembles, in certain cases, the appearance of death, that the most unfortunate mistakes have resulted from it.

Death-like appearance of patient.

There is recorded the case of Lady Russell, in the year 1745, whose body remained for eight days without giving any sign of life or alteration. This woman, who lived a long time after, was aroused by the sound of the bells of a neighboring church, whilst her husband, who vehemently opposed her burial, was holding her hand and bathing it with his tears.

In order to diminish the force of the attack and shorten its duration, everything binding in the shape of clothing must be removed which hinders breathing and circulation. The patient should be made to lie down on a bed, with her head elevated. It will take at least four persons to control the patient, when the attack is violent, to prevent her injuring herself. Her movements and struggles should not be entirely hindered by confinement, as she will be more exhausted if they are, at the end of the attack. A strait-jacket should not be used, as it is humiliating, and affects the patient unfavorably. Loud remarks should not be made upon her state, as she may hear them, and be made worse. Let her have free air, and be made to respire such pungent odors as acetic acid, liquid ammonia, or the scent of quills, horn, old leather,

Treatment.

or wool, thrown upon coals. A lotion of eight parts of water, to one of cologne or vinegar, may be applied to the temples and forehead.

In very violent attacks, it is well to employ dry or stimulating frictions over the whole body, and particularly the limbs and vertebral column, with camphorated alcohol, or a liniment made of olive-oil, two ounces; camphorated alcohol and spirits of turpentine, each one ounce; liquid ammonia and Sydenham's laudanum, each one drachm. Dry-cups may be added; and especially flax-seed poultices, sprinkled with mustard, applied to the hypogastric region, to the thighs, and even to the arms. But my space will not permit me to enter very deeply into pharmaceutical details.

The father of medicine recommends marriage to the hysterical female, as an escape from the disorder; and another bids the husband have connection with his wife, and she will become immediately convalescent. A titillation of the clitoris has even been said to dissolve the paroxysm. But it is sufficient to say that there are as many hysterical persons in houses of prostitution as in convents, and that married women are more exposed than virgins to uterine convulsions. Far from calming the attack, cohabitation would, as a general rule, only increase its violence.

It is proper to remark, that the action of therapeutical agents cannot be followed by good results, unless aided by careful diet and moral means. The diet must be according to the constitution of the patient. Strong persons, of full habit, should be prescribed a diet consisting of thin soups, milk, vegetables; a moderate use of ripe, or well-cooked fruits, and some of the white meats. Feeble and

languid persons should have a restorative diet. Finally, residence in some healthy situation; pure and temperate air; walks in the country, in the morning and evening, during the fine season; travelling; sea-bathing; agreeable occupations; domestic cares; useful and amusing reading; bodily exercises; riding on horseback; means for employing the mind; pleasant society; — such are the moral and hygienic means which assist medicinal agents, and even prevent the hysterical malady in persons predisposed to it.

GREEN-SICKNESS.

Green-sickness is a disorder accompanied by a pale-greenish tint, and puffiness of the face; loss of color, and dryness of the skin; general debility, and derangement of most of the functions, especially those of the circulation, digestion, and menstruation. This disorder is called in the books, *chlorosis*. There has always been great uncertainty as to its nature, location, and point of departure. It may make its appearance in girls who have their monthly discharges regularly; in pregnant women, also, and in those past the critical age; in children of both sexes; and, finally, in men. Some authorities consider it a nervous affection, accompanied by an excess of serous or watery blood. This disease is confined almost exclusively to the female; and, moreover, as the womb is deranged in a majority of cases, it seems probable that a diseased state of that organ may be the most common cause of it. The predisposing causes of chlorosis are, female sex; the age of puberty; hereditary predisposition; rapid and premature

growth; a feeble, melancholic constitution; a lymphatic, scrofulous, or nervous temperament; the privation of the physical enjoyments of love, or their abuse; the state of widowhood; onanism; sudden and continued suppression of the menses; and their too great abundance; frequent hemorrhage; and, finally, any circumstances which may weaken the nervous system; as, for example, depressing emotions, disappointments, grief, sadness, and the melancholy which accompanies unfortunate love. Says Ovid, the poet of love, the lovers' hue is always pale; that is the color expressive of love. Low, damp situations are conducive to this disorder, where there is not sufficient light, heat, and ventilation. The excessive use of vinegar, of green fruit, and of all crude, indigestible articles, leads to it. Excessive fatigue, and the want of exercise, and a sedentary, lazy, and voluptuous mode of life, all give rise to the derangement of the functions, which constitutes chlorosis, or green-sickness.

Symptoms. No disease inspires more tender interest or more touching compassion, than the state of paleness, suffering, and languor observed in a young, chlorotic girl; — like some delicate plant, deprived of the beneficent rays of the sun, she is a flower, which withers and droops away, even before its blossoming. The approach of this disease is marked by a state of habitual listlessness and melancholy; the patient becomes sombre and silent; weeps without cause, and sighs involuntarily; the face becomes bloated; the expression is, as it were, veiled; the eyes are sad and languishing; the eyelids, which are swollen, especially in the morning, are encircled by a blackish areola,

strongly contrasting with the pearl-white color of the sclerotic coat, and the pallor of the lips; the skin, particularly of the extremities, is dry and cool; the pulse is frequent; the breathing is difficult; digestion is deranged; palpitations occur; while weakness, weariness, a desire for sleep, or rather for repose, as well as the whole collection of symptoms, augment from day to day. The pulse seems, in some cases of chlorosis, to be small, because it is soft and very compressible. It is soft, because the blood is watery, and very gently impelled by the action of the heart, which organ is not duly stimulated; it is full and well developed, however, from the fact that the sanguine fluid is in excessive quantity, though serous, pale, and deficient in fibrine. The animal heat is diminished; the lips, nose, hands, and all the organs situated at a distance from the centre of circulation are cold, and almost icy. The young girl becomes swelled, and grows pale; for, to speak truly, she does not lose the red portion of her blood, but acquires more of the white than is necessary in proportion to the red.

As the disease progresses, the functions of the stomach are more and more deranged; the strangest and most depraved tastes manifest themselves; the patients prefer the most sapid substances, such as salt, vinegar, and green fruits; they seek with avidity indigestible substances, and such as are in no way nutritive, as charcoal, chalk, plaster, earth, ashes, spiders, flies, and other equally disgusting insects. The appetite gradually diminishes, until complete disgust for food is established; at other times, on the contrary, it is increased beyond measure, while the ingestion of food is followed by a

Depraved appetite.

sensation of weight at the epigastrium, and sometimes by vomiting. The tongue is generally large, and covered with a mucous coat; frequent nausea occurs, especially in the morning; a feeling of heat and weight in the epigastric region, and sometimes nervous pains in the course of the œsophagus, and extending through to the shoulders, make themselves felt. There is alternate costiveness and diarrhœa. The urine is small in quantity, and is pale and limpid, as in all the nervous affections.

The sexual organs are commonly affected with an abundant leucorrhœal discharge; most frequently, there is failure or suppression of the menses; at other times, they persist and last longer than natural; — but, far from alleviating the sufferings of the patients, the return of the menses is accompanied by the most diverse nervous disorders; by colics, by pains in the loins, by great depression, and by a kind of stupidity even. When menstruation continues, the secreted fluid, which is pale and watery, separates from the napkin into two distinct portions, and forms spots which lose their color by drying. The nervous system participates in the general languor of the functions; the patient is sad, melancholy, and indifferent to all enjoyments. She seeks solitude, sighs involuntarily, and weeps without cause; she is often tormented by sinister ideas; her temper is capricious, odd, and irascible; for her, all thought of happiness is gone, and in her despair she often speaks of suicide; to conclude, the night, far from procuring repose, brings her only broken slumbers and frightful dreams.

Ringing in the ears, vertigo, partial loss of sight, tremors of the limbs, cephalic, cervical, and dental

neuralgia, peculiar palpitations in the epigastrium, and, in some rare cases, even hysterical symptoms occur.

When the disorder is not checked, the symptoms increase in aggravation; the head is the seat of severe pain; the skin assumes a greenish or earthy hue; the abdomen is hard and tumid; thirst arises; difficulty of breathing, faintness, and palpitations are increased; diarrhœa, as well as hectic fever, creep in; and the emaciation makes rapid progress.

The fatal stage of the disorder.

Finally, incipient, general infiltration, extreme feebleness, invincible repugnance to all kinds of exertion, alteration of the features, and a pale-violet color of the lips, forebode approaching death, which comes at last, without shock, and almost without pain, surprising the patient under a complete state of marasmus.

Duration.

The duration of chlorosis has no fixed limit; but when properly treated, it commonly terminates by a return to health, in from one to two months. In twenty-eight cases treated by the writer, one-third recovered in less than twenty days, and a single case was protracted only to the thirty-second.

Distinction of jaundice.

Jaundice may readily be distinguished from chlorosis, by the yellow color of the skin, and by the nature of the stools and urine; by the yellow tint of the sclerotic coat of the eye, which is always pearl-white in chlorosis, and, finally, by the absence of nervous symptoms, of palpitations, and particularly of unnatural sounds in the arteries.

Treatment of green-sickness.

The disease is not at all dangerous in itself, and often disappears upon a mere change of air and regimen. When the patient can be placed in fa-

vorable hygienic and moral conditions, it is surprising to see the rapidity of recovery. Whatever may have been the cause that has brought on chlorosis, the patient should be removed from all exposure to cold and humidity; she should breathe a dry, pure, and moderately warm air. A dry, breezy situation, in a sunny exposure, should be

Clothing.

recommended. Clothes which, by the nature of their tissue, slightly irritate the skin, are to be preferred to any others. Flannel, worn next to the skin, and especially alcoholic and aromatic frictions of the whole surface of the body, should likewise be proposed, with the view of exciting the action of the capillary vessels, of inviting the blood into them, and promoting perspiration.

Food and drink of patient.

The food must consist of roast meats, fresh eggs, farinaceous vegetables, ripe fruits, and bitter and aromatic plants, for example, succory and celery. A mixture of chalybeate water with wine may be used as a drink during meals. Burgundy wine, which is astringent, is preferable. A slightly acidulated drink is good at other times. For a time, the longings of the patient, however strange they may seem, must be respected. Fruit, salad, and all crude articles, should be proscribed. Exercise should be insisted upon; and when the patient is too feeble to walk, riding should be resorted to. Pleasant, elevated scenery, where the air is pure, is invigorating to the patient. Boat-excursions, music, sea-bathing, and swimming in running water, are different hygienic means which will be found salutary to nervous, sad, and melancholy women. The use of mineral waters, taken at the springs, should be recommended at places,

where there is a numerous and brilliant society. Travelling and new scenes, which distract the attention from sorrowful associations, are excellent remedies. Sleep should not be in excess. Everything that stimulates the passions and emotions too powerfully should be avoided.

Of all the therapeutical agents, iron is the one that should be placed in the front rank, on account of its constant efficacy. This metal, regarded with good reason as a specific in green-sickness, or chlorosis, has been employed alone, or associated with a number of other remedies, such as the extracts of succory, parsley, absinthium, gentian, cinchona, rhubarb, etc. It has also been prescribed in combination with saffron and aloes, or with conserve of roses, anise, tartrate of potash, lemon-juice, chocolate, white wine (chalybeate wine). I have made a most advantageous use of citrate of iron, combined with sulphate of quinia, as in the following formula, which I subjoin as a very convenient and successful one, in the disorders dependent upon an excess of serous blood:— Take of citrate of iron, two drachms; sulphate of quinia, half a drachm; water, one fluid ounce; mix, and direct from twenty to thirty drops for the dose, in syrup and water. This should be taken within half-an-hour after each meal, so that it may be carried with the chyle along the course of the bowels. Iron.

EROTOMANIA.

By nymphomania is now understood an irresistible and insatiable desire, urging the woman afflicted to the venereal act. As to the cause of this dis-

Cause of disorder, moral and physical.

case, the better opinion seems to be that it results from a simultaneous irritation of the brain and sexual organs. This morbid fury of the venereal appetite is less a disease than a symptom, for the manifestation of which is required the concurrence of the brain and the organs to which amorous sensations are referred. The point of departure is sometimes in the brain, and sometimes in the womb and its appendages.

In the former case, the disease is developed under the influence of moral causes which secondarily irritate the genital parts; and in the latter, it is a primary irritation of the organs of generation reacting sympathetically upon the brain, and especially on the cerebellum, in which part of the brain phrenologists place the seat of the animal desires and amorous propensities.

The affection, which may appear at all ages, generally attacks women of an original uterine temperament, which is determined by the predominance of the sanguine system, and by extreme irritability

Women who are most liable to it.

of the abdominal viscera. Women of this constitution have some of the characteristics of the amorous Grecian poetess of old, Sappho; their stature is small, their skin dark, and their complexion highly colored; in them, the breasts and all the attributes of puberty have been developed at an early period; the clitoris and the nymphæ, which are generally of uncommon length, are endowed with exquisite sensibility. Young widows, who have to regret frequent enjoyments; public girls, who have been suddenly deprived by forcible seclusion of venereal pleasures to which they had abandoned themselves to excess; ardent women, married to men whose cold and feeble constitutions

prevent often-repeated sexual connection; and finally, those who are attacked with some chronic cerebral affection, are most exposed to this frightful disorder, especially when they inhabit warm climates, in which the passions are most vivid, and the imagination most exalted. There are some women whose genital organs acquire such a preponderance as to make it almost impossible for them to control the amorous flame that devours them.

Such was the young girl of whom Buffon speaks. "I have seen, and I have regarded her as a singular phenomena, a girl of twelve years of age, a dark brunette, of a bright and highly-colored complexion, of small stature, but already fully formed, with a rounded neck, and *embonpoint*, perform the most indecent action at the simple appearance of a man;—nothing could control her in this; neither the presence of her mother, nor remonstrances, nor punishments. Yet she did not lose her reason; and the attack, which was carried to such a point as to be frightful, ceased the moment she remained alone with women."

Causes acting through the brain.

Amongst the causes which act primarily on the brain, and secondarily on the sexual organs, should be included all conditions capable of producing an accession of excitement in the sensitive centre, and of increasing the exaltation of the senses and ideas; such as disappointed love; concentrated affection; the reading of lascivious and impassioned works; the sight of licentious paintings; amorous and romantic conversations; intimate communion with corrupt companions; frequent visits to balls or the theatre; the too assiduous cultivation of the fine arts, and accidental sight of

amorous interviews. As equally capable of producing nymphomania is regarded the abuse of what are styled aphrodisiac remedies, or of spirituous liquors, the immoderate use of aromatics and perfumes, which, by exciting the brain and the general sensibility, arouse and exalt the venereal appetite.

Causes acting through the uterus, etc.

The causes, whose action is felt in the first place and directly upon the womb and its appendages, and which may afterwards react sympathetically upon the brain, are, solitary pleasures; the abuse of sexual intercourse; an herpetic affection, or prurigo of the vulva; irritation of the clitoris and nymphæ; inflammation of the cervix uteri and of the ovaries. I may add, that the age of puberty, and that of the physiological cessation of the menses, as well as the epoch of their flowing, are circumstances most favorable to development of the disease which now is under consideration. Sometimes, the presence of ascarides, by irritating the rectum, nymphæ, clitoris, labia majora, and vagina, induces in the genital apparatus an excitement and itching which compel the patients to scratch themselves to such a degree, as to give rise to the most violent erotic diseases.

Symptoms.

In the beginning of the disease, the female experiences venereal desires, which are strongest at the menstruating periods, but which shame compels her to conceal. The care which she takes to hide the obscene ideas that constantly disturb her imagination, as well as the illusions of platonic love, which has irresistible charms for her, exalt her imagination, and render her sad, silent, and melancholy. She loses her appetite and sleep, and seeks solitude, in order not to be distracted from

the thoughts with which her imagination is constantly preoccupied. After the disorder has made some progress, far from seeking to hide her irresistible passion, the patient employs all her address to make it known by frequent sighs, by encouraging proposals, by voluptuous attitudes, and, finally, by complete forgetfulness of all modesty. At the sight of one of the masculine sex, the pulse of the nymphomaniac is agitated, her face becomes redder and more animated, her respiration tumultuous, her senses are obscured, she makes indecent proposals, and often indecent gestures; finally, when the irritation reaches the highest point, she strikes and tears everything that opposes her, and at last, falls into furious delirium. The female experiences lassitude of the extremities, and a sensation of itching heat in the loins and breasts; the urine, variable in quantity, is always clear; and the genital parts, which are constantly red, swollen, and irritated by handling, commonly are the seat of a fetid, and sometimes even purulent discharge. Lastly, hurried breathing, fatiguing palpitations, burning thirst, grinding of the teeth, spasm of the œsophagus, and, in some cases, hydrophobic symptoms, are other phenomena attending this disorder.

The termination of the disease is sometimes fatal, if complicated by organic disorders of the womb and its appendages, or of the ovaries. It is well known that Eusebia, wife of the Emperor Constantine, son of Constantine the Great, died in an attack of the uterine madness. Paul of Egina likewise cites the case of a beautiful woman of Delphos, who perished in a paroxysm of the same kind. Marriage is sometimes known to put

a stop to nymphomania. A writer on this subject relates the case of an Italian woman, who, in a paroxysm of erotic insanity, had escaped from her house and gone to a house of ill-fame, where several men satiated their passions upon her, recovered her health in the midst of their brutal caresses.

Treatment. The treatment depends upon the seat of the disease. Sometimes, the therapeutical means are to be applied to the brain, and sometimes to the genital organs. My own opinion is, that in the earlier stages of it, hygienic measures are better than drugs, because the disorder is partly moral. The patient's thoughts must be diverted from lascivious subjects, for which purpose constant occupation, travelling, and exercise by walking, are good. The old poet of love, Ovid, says truly, Cupid's bow is unbent, if the subject of the amorous passion is kept busy and employed. Of course, reading novels, balls, shows, the society of men, should be avoided with the greatest care. The patient must associate only with persons of her own sex. Sedative and cooling drinks, sweetened with syrup of orgeat or of currants; whey; broths made of beets and sorrel, and of chicken or veal; with nitre, lemonade, a milk and vegetable diet, general bleeding, applications of leeches behind the ears, — are useful methods of treatment. When the disorder results from masturbation, some herpetic affection, prurigo, leucorrhœa, or the presence of worms, emollient and narcotic injections, and application to the genital parts of cloths wet with decoction of poppy-heads, of lettuce, of henbane, of cicuta, etc., are proper treatment. Camphor may be employed internally. The nausea

excited by one or two grains of tartar emetic in a pint of water, to be taken in teacupful doses every hour, quells amorous desires. Hair mattress is the best for the patient to lie on. Any immoral mode of treatment, such as titillation of the clitoris, advised by some authors, is to be shunned. A milk and vegetable diet, and abstinence from all stimulating food or drink, are indispensable. Finally, in intervals of calm, the patient should be reminded of her duty to herself and family, which is dishonored by her shameful practices.

Diet.

CHAPTER XXII.

THE FEMALE SEXUAL ORGANS.

"Through fatal furrow of a female field."

SWINBURNE.

The essential part of the female generative system is that in which the ova are prepared; the other organs are merely accessory, and are not to be found in a large proportion of the animal kingdom. My readers have observed that almost all the names of organs used in physiology and pathology both are derived from the Latin and Greek languages. These names, when translated into equivalent English terms, will be found invariably appropriate and definitive of the parts which they designate. Of course, to the merely English reader, these learned scientific terms are somewhat obscure; but as science is not the property of any particular nation or country, but is something universal and cosmopolitan, it is better that its terms should be derived from languages, which, though dead, are intelligible to the educated everywhere. Woman, as compared with man, is passive, and acted upon, rather than active. Her organization indicates her relation to man, particularly her genital organization.

Physiological terms derived from Greek and Latin.

The order of disposition in the sexual organs of the female presents certain points of contrast, or,

rather inversion, to those of the male; but, considered from a true physiological point of view, they exhibit a beautiful and perfectly symmetrical design of nature, as illustrated in the adaptation of the elastic vagina to the erectile penis, and the elaborate but simple process by which the natural virile semen is safely conducted from its original depository, to the receptacle in which it is destined to animate a new and immortal being.

The female organs may be divided into *external* and *internal*. The former consist of the vulva and clitoris; whilst the vagina (or sheath, into which the penis is introduced during intercourse,) and the womb, or uterus, constitute the internal ones.

The vulva.

The term vulva (from *volvo*, "folding doors,") is the appropriate name given to the opening which commences at the anterior part of the hairy protuberance upon the pubes, called the *mons veneris*, or, in English, mountain of Venus. The vulva is furnished with double membraneous folds on each side, to within an inch of the anus. The space between the vulva and the anus is called the perinæum.

Labia pudendi majora.

The two exterior folds, called *labia pudendi majora*, or greater lips of the pudenda, are larger above than below, and in some women are very elongated. Beneath, or more internally than these, are situated two other folds, or duplicatures, of the mucous membrane of the vulva; called the nymphæ, or *labia minora*. They approach each other at the top, enveloping a prominent and sensitive body, named the clitoris, after the manner of the male foreskin. Expanding from this on each side, they become thicker in the centre, and decrease towards the orifice of the vagina. Their size is by no means uniform. In some females they are very

The nymphæ, or labia minora.

The clitoris.

small, and in others very large, projecting beyond the larger labia, or lips, and causing great inconvenience. But I shall speak of this farther, in connection with remarks upon such varieties of conformation as the external genitals of the female may present; according to differences of age, climate, and constitution.

As to the clitoris, it is supposed by some physiologists that this sensitive organ is the principal seat of sexual pleasure in the female. It is a hollow, prominent body, enfolded by the nymphæ, and bearing some resemblance to the penis in miniature. In some women, it is very long and prominent, so nearly resembling the penis as to cause the unfortunate subject to be set down as a "hermaphrodite." It is situated at the upper part of the labia; the nymphæ forming, as it were, a foreskin to cover its point, or gland, which is very sensitive, and becomes erectile during coition; but has no orifice. The internal membrane of the urethra is a little plaited, and perforated by diminutive ducts, which communicate with glands situated on its exterior surface, as in the male; but in the female there is no prostate gland.

The vagina.

The canal, or sheath, leading to the womb is denominated the vagina. The substance of its exterior orifice, beneath the mucous membrane, is formed by a cellular tissue which is thickest at its lower margin, surrounding the outside of the canal as far as the womb, progressively diminishing at the edge. Upon this texture, a small muscle is situated, to close the orifice, and called the constrictor vaginal. The vagina, in its quiescent state, is not more than three or four inches in extent, and its internal sides press on each other;

but it is capable of great distension every way, the length easily extending to six or eight inches under the excitement caused by the introduction of the male organ. The internal or hindmost extremity of the vagina terminates by surrounding the neck of the uterus or womb, which protrudes into it in the shape of an inverted bottle, with a hard, smooth prominence, called the *os tincæ*, having a transverse opening in the centre to the cavity of the uterus.

Os tincæ.

The womb, which is designed for the lodgment of the fœtus from the period of conception until delivery, is a hollow, symmetrical organ, shaped like a pear. It is placed in the pelvic excavation, beneath the convolutions of the small intestines, behind the bladder, in front of the rectum, and is attached inferiorly to the vagina. It is a thick, tough, flattened body, similar to an inverted pyramid compressed, having a diminished cavity in its unimpregnated state, which, however, when impregnated, expands without diminishing the thickness of its sides.

The womb, or uterus.

The Fallopian tubes are two soft canals, passing laterally from the cavity of the uterus at each angle, and extending in a horizontal direction. These extremities are formed like the palm of the hand, with fingers at each end, called *fimbriæ*, which are generally hovering over the small oval masses, called ovaries.

The Fallopian tubes.

The ovaria are placed between the folds of the broad ligaments. They are about the size of a Spanish nut, containing fifteen or twenty Graafian vesicles, as they are termed, which are supposed to be grasped by the fimbriæ in coition; then to pass down the tube, and uniting with the male

The ovaries.

semen, to form the nucleus of the fœtus. The nerves that supply these organs with sensation have connection with the great sympathetic nerve, and with those that issue from the spinal marrow. Here the analogy between the reproductive agencies in the different sexes is exemplified in an interesting manner. In males, the spermatic cord descends with the vessels to the testicle; in females, the corresponding cord of nerves follows the spermatic artery in its distribution to the ovaries and womb. Again: in the pudic nerve in the female, it sends branches to the vulva, anus, and clitoris; in the male, it accompanies the artery of the same name, going to the muscles of the anus and perinæum, to the penis, and to the gland; and here it is an important aid to erectile action.

The lymphatic nerves also furnish an example. In males, they pass up in sets from the testicle and its coverings. They accompany the spermatic cord, forming several trunks, and join the lumbar glands. Others (in the male) pass up from the seminal vessels, uniting with them at the bladder; whilst, in the female, the lymphatics from the womb and the vagina also follow the same direction, joining those of the lower extremity.

From this it will be seen, that, allowing for the difference between projection and reception, and for the important operation of secreting and preparing in the male organs the semen, or "life-seed," for its destination in the womb, Nature works by an analogous process in either sexual system, silently pursuing her great object of reproducing life, and perpetuating the generations of mankind.

Colombat asserts that in southern climates, the sexual parts are found a little higher up, and more in front, than in cold and damp countries. Thus, in the Scottish, English, and Dutch women, the vulva is not so directly in front; and the womb is lower down than in French women of the southern departments, in Spaniards and Italians. The latter are known to have the labia of a more rounded form, and containing a more abundant and elastic cellular tissue. *Per contra*, Dr. Meigs thinks it difficult to imagine any other foundation for the above assertion than the imagination. In young females, the labia are thicker above than below, in which respect they differ from those of women who have borne children. In early life, these organs are not so near together as at a later period, although they are more prominent, and of a larger size, relatively. At the age of puberty, they are in mutual contact, closing the genital fissure, and are also of a firmer texture than at any other period. In married women, and particularly after child-birth, the labia become soft and pendulous, losing their original form and evenness.

The sexual parts in southern climates.

The labia in young females.

The labia in married women.

The mucous membrane that lines the interior surface is of a lively red in the virgin, but acquires a brownish and violaceous hue in such as have been the frequent subjects of coition, and who have had many children. At birth, the nymphæ generally project beyond the level of the labia; in young virgins, the labia conceal them, but they again become salient in child-bearers. In the commencement, from being firm, erectile, and of a rosaceous hue, they grow flaccid, and, like the mucous membrane of the labia, turn soft, brown, or violet-col-

The nymphæ.

ored, and offer a greater variety of appearances than the labia do in different races and climates.

The nymphæ in Turkish and Persian women.

Among the Turkish and Persian women, the nymphæ are naturally much more prominent than in European or American women; and, in some of them, they grow so very large as to obstruct the entrance, and constitute a disorder so disgusting, that it is removed by means of the excision of the swollen part.

Several distinguished naturalists have spoken of a very considerable elongation of the nymphæ,

The Hottentot apron.

which is known as the Hottentot *apron*, and which seems to be a conformation natural to the Bosjesman women of Southern Africa. Le Vaillant, the celebrated Dutch traveller in Southern Africa, says that this hideous conformation, this sort of fleshy apron of the Hottentots, is not an elongation of the nymphæ, but of the labia themselves, which, according to his account, grow to the length of eight or nine inches.

The uses of the nymphæ.

The uses of the nymphæ are but little understood. The ancients conferred upon them the name of nymphæ, in allusion to the fabulous nymphs who presided over springs and fountains. Most of the accoucheurs suppose that their use consists in furnishing, by their unfolding in labor, more material for the distension of the external parts. It has also been said, that, as they are endowed with the highest sensibility, they contribute to augment the sexual excitement. It is supposed, that during the act of copulation, the nymphæ being forced backwards into the vagina, their upper extremity, which surrounds the clitoris as a foreskin, is drawn forwards and downwards, so as to compel the clitoris to touch the dorsum penis, which occasions a much more intense erotic sensa-

tion. Like the other parts of the external genitals, the clitoris is found to be the subject of differences which are worthy of mention.

This exquisitely sensitive point, which has been compared to the uvula, and which is like a miniature penis, is relatively much larger at birth, than at any other period. The clitoris soon ceases to increase in size, and at puberty is commonly four or five lines long. But in a few cases, women are to be met with, in whom the clitoris is six inches long; which gives it a considerable resemblance to the male organ.

Women in whom the clitoris is of great length.

This state of a case, as has already been observed, generally gives rise to a suspicion of hermaphrodism, and is observed in women of a very masculine character, who prefer the kind of occupations generally devolved upon men alone. Such women commonly have very small breasts; but the muscular and pilous systems are, on the other hand, greatly developed. The upper lip and chin are bearded; they are tall of stature; and, in fact, seem to belong really to neither of the sexes, and are said even to be fond of the illicit enjoyment of other females.

If, as is generally believed, the frequency of conception is in a direct ratio to the intenseness of the erotic excitement in the sexual act, it is a consideration of much importance in surgery, to respect, as far as possible, both the clitoris and nymphæ, which, in consequence of their sensitive endowments, appear to be the principal seats of the erotic excitations.

Varieties of conformation in the vagina.

There are varieties of conformation in the vagina, the knowledge of which is of much importance to the practitioner. In the virgin state, the tube is

partially closed, in its posterior part, by a membrane called the hymen, which, although ordinarily very thin, is sometimes found to be several lines in thickness. In childhood, this membrane forms a semilunar fold, and it is only at puberty that it assumes a circular form in some instances. This membranous fold, which is correctly regarded as one of the best signs of virginity, is, nevertheless, sometimes found to exist in young persons who have ceased to be virgins. In such cases, it has been preserved, by its thickness and elasticity, from rupture by the violence offered it.

Thehymen.

Examples of this sort are very rare, however; for, in an immense majority of cases, the hymen is ruptured at the first sexual approaches, and the fragments into which it is torn constitute certain small fleshy eminences. Notwithstanding the great moral importance attached to the integrity of the hymen, there are cases met with in practice in which the surgeon is compelled to destroy the membrane.

The vulvar orifice.

The vulvar orifice of the vagina, which in young marriageable girls is not very dilatable, is much more so in women who have borne children; while its dilatation is almost nothing in women arrived at the change of life, and especially in such as have long over-passed that critical period. As the sexual organs at this age have no functions to fulfil, they become atrophied; the vagina contracts; its mucous coat, which was soft and full of pleats in youth, becomes smooth, whitish, and polished; the vaginal orifice, instead of being a supple and easily dilatable ring, becomes hard and resisting, and in many persons, so contracted as scarcely to admit of the introduction of the little finger.

The womb subject to displacements.

In women who have had no children, the womb, from the top of the fundus to the *os tincæ*, measures from twenty-six to twenty-eight lines in length. Being retained in its place by very lax ligaments, the womb, without being itself the subject of disease, is readily subject to displacements, and yet continues to exercise all its functions.

Faulty conformation.

The height of the womb in the pelvis may differ according to the stature of different women, their climate, or some peculiarity of the constitution of the individual. Thus, in very tall women, in women in warm latitudes, but especially in virgins, the womb is higher up than in those in cold and moist countries; in such as have had no children; or those in whom the physical conditions I have stated are absent.

Faulty conformation of sexual organs, and absence of.

The sexual organs of females are subject to vices of form, consisting in their absence, occlusion, narrowness, adhesion, voluminousness, connection, and shape. Most of these faults depend upon some arrest or aberration in the law of their development, or upon some disease affecting the individual, either before or after her birth. The records of the science contain no instance of complete absence of all the internal genital organs. In some rare cases, only a single ovary has been found, with one tube and half of a womb. There may be absence of the ovaries, while all the other sexual organs are in a natural condition. The Fallopian tubes have been found to have contracted adhesions with the peritoneum: in some rare cases, they have been found closed; in some instances, near the ovary; in others, near to the womb. Cases are on record of absence of the womb; others, in which the neck of the womb alone existed; and others, in which it remained in

the rudimental state. The womb has also been found divided into two equal or unequal portions, either entirely or partially, internally or externally, and that in the same case. Such a case constitute

Double uterus.

what is called a double uterus, or two-horned uterus, like the natural uterus of a quadruped. Or, it may be perfectly divided into two separate wombs, each of them opening by an os uteri into a separate vagina. It has happened but very rarely indeed, that the womb has been so very little developed as to render it utterly unfit to perform its functions.

The cases of two women are on record in the books, in each of whom the womb was not larger than it is in a child nine or ten years old. They were both moderately fat, the mons veneris was not covered with hair, and the other external genitals presented the same character as are observed in childhood.

Faulty vagina, or deficiency of.

Specimens of faulty formation of the vagina are as frequently met with as those of the womb; — it may be wholly or partially wanting; or the external orifice may be closed by a membrane, that, at the age of puberty, prevents the escape of the menses, and gives rise to the most serious consequences. It may be wanting in its upper or middle portion, and not communicate with the womb. It has been known to open into the rectum. But this deformity, which is always complicated with imperforation of the vulva, does not compromise those affected with it; but it generally remains undiscovered till the menstrual discharge taking place in the rectum causes its existence to be discovered.

Curious case.

There is an account of a girl who conceived by the rectum, and was brought to bed without any other accident than the rupture of the sphincter-ani-muscle.

The clitoris, the labia, and the nymphæ, either individually or all alike, do, in certain cases, acquire enormous size; or the external genitals may be wholly wanting, or may be co-adhesive either by a single point of contact or throughout. Of course, the absence of any of the principal genital organs, such as the womb, or vagina, involves barrenness as a matter of course.

The sympathies of the womb. Idea of the ancients.

The ancients, who were ignorant of the sympathies of the uterus with other parts of the body, supposed that it was endowed with a special existence, and a temperament independent of the general constitution. They thought that the body, properly speaking, should be regarded merely as a cage, within which the womb enjoyed the faculty of moving in any direction, and of affecting any organ to which it might proceed; while the latter could not exert upon it the smallest influence.

Plato says "that the womb is a wild beast, that obeys no reason; but which, when its desires are unsated, wanders about within the body, and excites all sorts of irregular motions." The sympathies and the connection that exist between the womb and all the other organs may be made manifest by the following phenomena: —

Sympathy of the womb with the breasts, and stomach, and brain.

First, with the breasts; by the decided coincidence which is observed at puberty in their growth; in the development of the genitals, and the first appearance of the monthly flow. Second, the sympathy of the womb with the stomach is rendered sufficiently manifest by the qualms; the strange appetites; the nausea and vomiting; and certain hysterical affections observable in some pregnant persons; and in those who have irregular menses, or some disease of the womb itself. Third, the sympathy with the brain is perfectly evident.

Do we not find that pregnant women, on the one hand, lose their memory; or, on the other, have it greatly strengthened? that their imagination is much more lively, or that they become less intelligent; that they exhibit symptoms of insanity; that they wish to bite persons whom they really love; or are prompted to homicidal acts; lose their reason; become maniacs, cruel, thievish, etc., etc.? The change in the voice in puberty and at the close of the menstrual period of life; the alteration of the voice sometimes met with in pregnancy, and in certain affections of the womb; the sensation often excited in genital organs when a child or a lover imprints a kiss upon the lips, or merely touches any part of the body; the indigestion; colic, headache, toothache, ringing in the ears, and other symptoms felt in different stages of pregnancy; the energy imparted to the womb in labor by the inhalation of acetic acid, by frictions with alcoholic liquors, or the application of cold to the belly; and a variety of other phenomena, both physiological and pathological, compose a mass of proofs capable of establishing the sympathies that exist between the womb and all the other organs; and prove the accuracy of the saying of Von Helmont, that, on account of the womb alone, woman is what she is; and that woman suffers every disease in a twofold manner, on account of the same organ and its sympathies.

An attempt to explain the causes of the great influence of the womb upon the rest of the body and organs which compose it, would be to enter a labyrinth of theories easier to imagine than to unravel. Any researches made in this direction would certainly tend only to prove, still more conclusively, that man must ever in vain seek to lift up the veil that shrouds the impenetrable secrets of nature.

CHAPTER XXIII.

BARRENNESS.

Barrenness may be defined to be an incapacity in any woman to conceive; notwithstanding copulation may, in her case, take place in a natural manner, and be accompanied with all the apparent conditions of fecundation. There are two kinds of barrenness, which are perfectly natural. The first is that which exists in young girls previous to puberty; and the second takes place in women who have passed beyond the change of life. Women giving suck are very apt to be barren.

Two kinds of natural barrenness.

A woman may be impotent, but not sterile, and, *vice versa;* for, as respects the former condition, a state of the sexual organs may exist, sufficient to prevent intercourse, and yet, upon its removal, impregnation may take place; and, as regards the latter condition, perfect competency to intercourse may exist, and yet conception may never occur. She may also be both impotent and sterile; or, in other words, were the impediment to due intercourse entirely removed, impregnation might not be effected. Sterility is very much more common than impotence in the female, and even than impotence in the male.

By the term impotence, I mean inability, through [illegible], privation or malformation of the sexual parts, to have intercourse. The causes of impotence in the

female are, an impervious state of the vagina; absence of this canal altogether; remarkable constrictions of it; the division of it by a septum running downward from a double uterus; adhesions of the sides of the vagina, or of the labia; and the termination of the passage abruptly in a *cul-de-sac*. An impervious vagina may be caused by changes in the soft parts from inflammation or irritation, the passage becoming first remarkably contracted, and then obliterated altogether.

There is a case recorded, where, upon dissection, the womb and vagina were found to constitute one solid mass, without any cavity in either. In a child examined after death, no trace of genital organs peculiar to either sex was found, externally or internally. Although such instances are rare, there is no doubt that one or more of the different parts forming the female organs may be wanting. Congenital narrowness, or narrowness of the vagina dating back to birth, has been observed in a very few instances. In one or two of these, however, impregnation occurred, and the passage became enlarged in the progress of pregnancy. Contraction of the vagina was said to have existed in the celebrated Joan of Arc. The division of the canal by a septum, or partition, has been met with in a very few cases only. Firm adhesions of the labia pudendi are not unfrequent in children, in consequence of inflammation. I have seen several instances of these adhesions, of various extent, duration, and firmness. They are rare in females after the age of puberty; but they have been met with in some cases, so complete, as almost to prevent the passage of the urine.

Absence of parts.

Adhesions of the labia or lips.

There are cases recorded, of obstruction by a

strong membrane at the entrance, or in some part of the passage. These obstructions may be imputed to adhesions long previously formed, which have afterwards taken an organized or membraneous state, rather than to an unusually firm hymen. A thickened hymen, however, may prevent intercourse, and thus be a cause of impotence, although not a permanent cause. Complete prolapsus uteri, or falling of the womb, retroversion of the uterus, prolapsus of the vagina, cancer of the vagina or uterus, and extreme brevity of the vagina, generally incapacitate for sexual intercourse; although pregnancy has happened in rare cases, notwithstanding these difficulties.

Falling of the womb, tumors, polypi, etc.

Sterility may proceed from absence of the womb, or of the ovaria, or of both. When the womb is wanting, the vagina is usually short. It may also proceed from a scirrhous or hardened state of this organ; from tumors in its substance; from polypi in its cavity, or attached to its neck; from the closing up or occlusion of the Fallopian tubes, or adhesion of their fimbriated extremities to adjoining parts; from narrowness, or entire obstruction of the os uteri, or mouth of the womb; and from disease of both ovaria. The mouth of the womb may be completely obstructed by the agglutination, or sticking together, of its sides, or by a false membrane stretched across it, either internally or externally. The openings of the Fallopian tubes may be also closed by a membrane, or by an albuminous exudation from the internal surface of the womb. The tubes may be either partially or altogether obliterated, in consequence of the extension of inflammatory action to them from the womb, or

Sterility, or barrenness, causes of.

adjoining parts. When these alterations extend to both tubes, sterility must necessarily follow. Although tumors developed in the body or neck of the womb, and polypi attached to its internal surface, generally prevent pregnancy, yet instances have occurred in which conception has nevertheless taken place. These are, however, very rare, and abortion has always occurred during the early months. A tumor or polypus may be formed on the internal surface of the womb, and yet, after its removal, the patient may conceive and bear a child at its full time.

Temporary causes of barrenness.

The above causes are mostly productive of permanent barrenness; but there are others, which admit of removal. These are, chiefly, too profuse or too frequent and difficult menstruation; constant or profuse leucorrhœa, or whites; inflammatory affections of the womb or of its appendages; dislike, disgust, on the part of the female, etc.

Profuse menstruation.

Profuse or frequent menstruation is a more common cause of barrenness than is generally supposed, because it prevents the retention of the ovum until it has undergone the changes necessary to its attachment to the womb. When barrenness depends upon leucorrhœa, or the whites, proceeding from local relaxation or general debility, it may be removed upon the disappearance of its cause.

Obstructed menstruation.

Delayed, retained, obstructed, or suppressed menstruation frequently occasions barrenness. Some females have, however, conceived, who have never had the monthly flow; and the mere suppression or obstruction of the catamenia may, or may not, prevent pregnancy; various other contingent changes, or concurring circum-tances, either favoring or pre-

venting this result. Difficult menstruation is sometimes a cause of barrenness, but its influence also will depend much upon other circumstances.

Other temporary causes.

There are other causes of temporary barrenness. Among these, the most common are too frequent, yet inefficient sexual intercourse; too early marriages; general ill health, and weakness or exhaustion of the female organs, owing to premature or too frequent excitement. Various circumstances connected with barrenness in prostitutes have, perhaps, thrown some light upon certain of the causes of this state; and particularly the fact, that many of this class have had children after marriage, or after relinquishing promiscuous intercourse. Numerous instances have occurred of females, who, having been obliged to marry against their inclinations, have not conceived, and yet have had children from a second marriage. It is generally understood, by females of all ranks in society, that indifference during the venereal act, or suppression of the orgasm or thrill of sensual enjoyment, will prevent pregnancy; and although they are sometimes deceived in this respect, yet their inference is correct, in the main. This is one of the principal causes of the barrenness of prostitutes, whose embraces are merely venal, and who, at most, merely feign pleasure, rarely experiencing.

Sterility in prostitutes.

Marrying against inclination.

Indifference during coition.

The use of aphrodisiacs.

In ancient times, and in modern both, and in countries civilized, semi-civilized, and savage, the removal of impotence and barrenness, or inability to conceive, by the use of heating substances, supposed to possess aphrodisiac properties, or properties exciting the sexual appetite, has been, and is frequently attempted. The prematurely aged, worn-out debauchees, and the community gen-

erally, in some parts, especially in China, Japan, Africa, etc., often employ substances which are reputed to possess these properties.- The poet Pope, in his tale of January and May, speaks of

"Cantharides that fire the lazy blood."

Their effects commonly injurious.

But the effects they produce, when they produce any, are more commonly injurious than beneficial. Musk, ambergris, cantharides, phosphorus, opium, the hot spices, aromatics, coffee, vanilla, borax, ginseng, castor, saffron, etc., are supposed to possess aphrodisiac virtues; and a diet consisting chiefly of fish, or shell-fish, has a similar repute. Circumstances may arise, in which it may be proper to prescribe some of these as stimulating and restorative; but others of them ought to be employed with extreme caution, particularly cantharides, phosphorus, and borax. The nostrums said to possess the virtues in question ought not to be resorted to. Certain articles of food, as pigeons' eggs, particularly raw eggs, caviare, herrings recently pickled, oysters, truffles, etc., may be employed as being, at least, harmless; but the less that heating medicines are prescribed, the better, unless under certain circumstances which may occur to require them, as in cases where the sexual function has not been restored after exhausting and depressing diseases. Kaempfer states that a combination of musk, ambergris, opium, and aromatics, in the form of small pills, are much employed by the Chinese and Japanese, as an aphrodisiac; and I believe that it is not without some degree of efficacy. But it is very obvious, that the prolonged, or too frequent recourse to

Pigeons' eggs, oysters, etc.

these and similar substances is most injurious, both morally and physically.

Treatment. The barrenness of females must be treated with strict reference to causes, as far as they may be ascertained or inferred. When it is chiefly functional, and induced by exhaustion, or by noxious practices, attention should be given to the digestive and uterine functions; and the use of the chalybeates, or of chalybeate or other tonic mineral springs, with air, exercise, and early hours, is recommended. For females, as well as males, the cold salt-water bath, the shower-bath, or the salt-water *douche* on the loins, will be of great service. The importance of a due regulation of the mind, of healthy occupations, and of abstemiousness, should be duly estimated. In cases of organic difficulty, lesions, and deficiencies, some are hopeless and remediless; yet a few of them may be assisted by art, either temporarily or permanently. Absence of an organ, or part, essential to the function of generation, in either sex, is generally productive of impotence and barrenness. Yet, an imperfection only, and disease of one or more of these organs, occasioning either inability in the male, or barrenness in the female, may be remedied. Contractions of the vagina, and even constriction or narrowness of the mouth of the womb, a stopping up of the entrance of the vagina by adhesions of the labia or lips, or by a morbidly thick hymen, or by a false membrane, falling of the womb or vagina, uterine polypi, whites, difficult or painful menstruation, and inflammatory states of the uterus, may be severally remedied; and although barrenness may not be always, it will be frequently also removed.

Cases of inability and barrenness, from moral and functional causes, are the most common; and, although they require the most scientific and judicious treatment, yet the mental as well as the physical imbecility that often characterizes them, brings them more frequently in the hands of pretenders, empirics, and quacks, than in those of the qualified practitioner. The cases which proceed from these causes may be arranged into, first, those which depend upon exhaustion; second, those which proceed from disuse, or an imperfect exertion of the function; and, third, those which arise from excessive mental and physical excitement.

Barrenness seems to be more common in hot, than in temperate and high northern latitudes. The abuse of baths and of venereal pleasures are, perhaps, the causes of it. There is no doubt, that women who abuse these pleasures, are, like the whole class of prostitutes, very subject to barrenness; which, moreover, is far more common in women than among men. It is, therefore, not without some show of reason, that when a couple, of proper age, continue to be without offspring, it is the woman who is generally in fault. Perhaps it is hardly proper to apply the word barrenness to men, who, when incapable of procreation, are more properly termed impotent. A want of consonance between husband and wife, as to temperament, causes infecundity in marriage; also, too violent and too frequently repeated transports; as well as a constitution in the female that resembles too closely that of the male, such as we observe in tall women with small mammæ, or breasts, strong, coarse voice, and brown skin, and who are covered

Sterility more common in women than men.

Masculine women apt to be barren.

with hairs in places usually destitute of them. Though certain women have been known not to have been impregnated by one husband, ought we to count for nothing the greater generative power of the last husband? And, besides, is it not often the case, that a woman shall be sterile for a certain time only, and that many women have become pregnant after being several years married, yet without any change of husbands? Anne of Austria gave birth to Louis XIV., after twenty-two years of barrenness; and Catherine de Medicis brought forth the first one of her ten children, after she had been married ten years to her husband, Henry II. Is it not also known that women, even such as manifest the greatest indifference for their husband's embraces, or who have been very fat, could yet be impregnated by the embraces of men of age and temperament the most various? Further, are there not many who become mothers without taking the least voluntary part in the genital act, inasmuch as they had been surprised by force, or had been in the lethargy of the profoundest narcotism?

No signs to distinguish fruitful women.

There are no certain signs by which to distinguish a barren from a fruitful woman. Hippocrates, indeed, remarks that fruitful women are small, of dark complexion, menstruating freely; that they have well-developed and projecting breasts, with the womb dry, neither contracted nor too low. He adds that, on the other hand, unfruitful women are pallid, do not menstruate well; they are fat and fleshy, too ardent or too cold in love, and are troubled with the whites and with headache. The fact is, we meet with fruitful women of all the various temperaments; while we also observe a great many barren ones who

enjoy the most perfect health and the most regular conformation; for, strictly speaking, barrenness is not a disease. If we suppose in a case, that non-fecundation depends upon an inclination, and particularly upon an anteversion of the womb, we might recommend a *coitus more ferarum*, in accordance with the advice of Lucretius. Further, it would be proper in all cases to recommend the sexual approach just before and after the menstrual discharge. This is the moment when the mouth of the womb is open, and when the organ has the greatest amount of action, and is therefore most apt for conception. It was by giving to Henry II., the counsel previously imagined for such cases by Hippocrates, that Fernel was so fortunate as to procure for France a dauphin, and to put an end to the sterility of Queen Catherine de Medicis.

Intercourse *more ferarum*, a cure of sterility sometimes.

When the womb is most apt for conception.

Excessive ardor, a cure of.

If it be supposed that an excessive degree of ardor in the genital act is the cause of the barrenness, it might be useful to prescribe an emollient regimen, baths, light food, and cooling drinks, and especially the use of cold milk, containing a teaspoonful of lime-water to every cupful. Long walks and journeys could not but be useful.

Lymphatic temperaments.

In contrary circumstances, that is, where the woman is of a lymphatic and cold constitution, and remains indifferent to the conjugal caress, we might recommend country air, tonic and stimulating baths, especially sea baths, and chalybeate and sulphurous waters. The patient would be the better, likewise, for a substantial diet; eggs, a glass of generous wine, chocolate, sago, celery, mushrooms, etc. In fine, where there exists a complete state of anaphrodisia, or insensibility to the ardors of sexual intercourse, we might advise the frequenting of the ball-

room, the theatre, and even the reading of romances and other works of a somewhat amorous character.

Excessively fat women.

Where the female is excessively fat, attempts might be made to add to the energy of the entire system, and to reanimate the action of the womb, by prescribing the internal use of mint, balm, saffron, aloes, or nutmeg.

Sterility, from excessive venereal indulgence.

In women of too strong a constitution, recourse should be had to venesection, to tepid baths, to a half-diet, and to milky, acidulous, and cooling drinks. Where the barrenness may be supposed to arise from excess of venereal indulgence, the parties ought to be separated for some time, or at least learn more moderation as to their sensual gratifications.

A case of absence of the womb.

Before closing the present chapter, I will quote an account of a woman who was wombless, from Dr. Meigs. This case illustrates the fact, that the external genital organs may apparently be all right, and yet the womb be wanting. Dr. Meigs prefaces his account of this singular case with the recommendation that marriage should be postponed until after the appearance of the monthly discharge. The following case, he says, is sufficient to confirm this opinion; and I cite it the more willingly, as showing, not only that coincidently with the absence of the womb, there may be well-formed mammæ, or breasts, and external organs of generation, but the existence of the amorous propensity. Mrs. ——, aged twenty-two and a half years, was married to her present husband more than two years ago. She is of middling stature, of a fair complexion, and presents all the exterior appearances of a person in perfect health. She is not fat, but has a certain *embonpoint*, a good

figure, and a very feminine and most agreeable expression of countenance. She is, indeed, a handsome woman. She has never menstruated; nor has she suffered pain or any severe attack of disease; says that, as she did not menstruate at the proper period, medical advice was sought, and followed in the treatment of the case. That treatment proved unsuccessful, and she was married, with the expectation (of her friends) that the marriage would be followed by the eruption of the catamenia. The mammæ were, at the period of the marriage, well developed, and the pudendum amply supplied with hair; indeed, all the phenomena of a perfect development of the sexual system were present, except the menstrual office. The husband found, however, that some unknown cause acted as an impediment to the congress; and, after more than two years of concealment, he consulted me upon the subject. An opportunity being allowed me of making a full investigation in the presence of her mother, I found the external organs perfectly formed; the mons veneris large; the labia and nymphæ, as well as the clitoris, perfect, and the os magnum of a natural appearance; but the vagina was a mere *cul-de-sac*, not more than two inches, and probably less than that, in length. Upon pressing the point of the finger against the bottom of the *cul-de-sac*, it seemed to have no connection with any part above it. I requested the lady to lie upon her back, and introducing an index-finger as far as possible into the rectum, I explored with it the excavation of the pelvis, in order to discover any tumor, or any organ that might be contained within the cavity; but as all the tissues were ductile

and very yielding, I began to suspect that there might be no womb at all in the case. Therefore, laying the fingers of the left hand upon the lowest part of the hypogaster, and pressing them firmly towards the finger that was used in exploring the internal parts, I found that they could be brought so near to each other, as to make it perfectly clear that there was no womb in the case, or I must have felt it, so near was the approximation of the finger of the right to those of the left hand. Having, by the most careful exploration, in this manner discovered the unfortunate state of the young lady, I felt obliged, in a conscientious discharge of duty, to tell her the whole truth, which I did in the best way I could; and yet, as may be readily supposed, the knowledge of her situation was accompanied with all the appearance of that violent distress and agitation that might naturally flow from such unhappy circumstances.

The aphrodisiac sense, or amorous feeling, in this lady is very strong, which might well be the case where the ovaria are fully developed, even though the uterus had never been evolved in her constitution.

CHAPTER XXIV.

WHITES.

This disease is known as the *fluor albus*, in Latin; the *leucorrhœa*, in Greek; and in English, *whites*. The scientific name signifies simply a white flow, or running. It is a disease which has been observed from the remotest antiquity, and has been called by as many names almost as there are authorities who have treated of it. Without regarding inflammation as the sole cause of leucorrhœa, we may safely assert, that whatever be the origin of this affection, it has, as a principal and constant character, an unusual secretion of mucous fluid, more or less white in color, escaping from the vulva in uncertain quantity, and of variable shades and consistence. Though it is generally agreed, at present, that leucorrhœa has its immediate source in the follicles and upon the whole surface and lining membrane of the womb and vagina, various circumstances would make it appear probable that the leucorrhœal discharge may also be formed in part by a serous exhalation from the vessels that secrete the menstrual blood. In fact, it has been remarked that a serous fluid, regarded as slight fluor albus, ordinarily precedes the appearance of the monthly turns; and that when this latter evacuation is irregular, it alternates with a leucorrhœa, which

Definition of whites.

Source of.

Leucorrhœa and menses.

increases in proportion as the sanguine discharge is less abundant; and *vice versa.*

We moreover often see suppression of the menses replaced by a salutary leucorrhœa; and we know that women, who, in this condition, have whites, suffer less injurious results from suppression, and that the same thing often occurs in them at the final cessation of the flowers. Though the intimate connection of these two discharges can be rendered still more evident, by the remark, that the appearance of the menstrual discharge commonly stops whites, it may be proved, on the other hand, that whites may have its origin in any of the sources that I have just mentioned, or in either one of them at a time. Unfortunately, positive facts are wanting; and without them, there remain only conjectures and uncertainty.

Intimate connection of.

In large cities, leucorrhœa is developed under the influence of so many causes, that there are few women, in such places, who are completely free from it. Although this affection makes its appearance particularly from the first approach of menstruation up to the period of its cessation, no age is free from it. Girls have been met with, only six or eight years of age, who were attacked with it; I myself have had occasion to observe several examples of it early in life. It is met with more frequently in females who are large, fair, nervous, hysterical, slight, delicate; and in those with red hair, and such as have the skin covered with stains. Though women with a brown skin and black hair are not exempt from it, it is rather incident to those who are of the opposite temperament. A cold and moist climate, and prolonged residence in low

Large cities productive of.

No age free from it.

What women most liable to it.

Moist climate promotive of.

marshy situations, are particularly apt to produce leucorrhœa.

The mode of life which women lead in large cities delivers them over, so to speak, defenceless, against the numerous causes of the chronic inflammations of the utero-vaginal mucous membrane.

Causes of disease in large cities.

Thus, in large cities, may be cited as causes of the disease, — idleness, a sedentary life, the constant contact of the two sexes, and the frequenting of places where everything inspires pleasure; late hours, dancing, frivolous occupations; and the study of the arts, that give new activity to the imagination; reading of love stories; the pernicious establishment of an early and artificial puberty; the premature shock of the genital organs; solitary pleasures; the concentration of the sentiments and thoughts on objects which keep the genital organs in a sort of permanent excitement; finally, a number of vicious habits and excesses of all kinds, which, by causing changes more or less serious in the general constitution, react more particularly upon the sensibility of the womb, — that

Womb, centre of morbid action in female.

organ in the female being not only the most apt to lend itself to fluxionary movements, but likewise the centre towards which all the diseased actions seem principally to tend.

Kind of diet productive of it.

The use of tea and coffee may also contribute a good deal to the production of leucorrhœa; — the same is true of the too frequent use of salt meat and fish, shell-fish; farinaceous substances, whether indigestible, or too succulent; beer; spiced dishes; ablutions too often repeated, and the abuse of warm baths; of purgatives, of emmenagogues, and of preparations of milk.

It is necessary, also, to range among the causes of leucorrhœa, the sudden cessation of excretions, whether natural or artificial; amongst others, that of general or partial perspiration of the feet, hands, and armpits. There are some women, in whom the simple fact of having the arms uncovered, of wetting the feet, or sitting upon a cold or damp seat, is sufficient to give rise almost immediately to a flow of whites. The suppression of an exutory, such as a cautery, or a blister, or seton; the suppression of habitual vomiting, of diarrhœa, of hemorrhoidal discharges, of the suppuration of an old ulcer; the striking in of a cutaneous eruption; or the retrocession of any affection of the skin or joints; and, lastly, derangements of the monthly turns; failure of lactation; weakness of the gastric system; the sudden disappearance of a pulmonary catarrh; or any other disease of the mucous membranes, are all likewise so many causes of leucorrhœa.

Sudden stoppage of perspiration, wetting feet, etc.

Suppression of an issue; effect of.

The close sympathy between the brain and organs of generation, accounts, to a certain degree, for the development or augmentation of the affection which engages our thoughts in consequence of a moral disorder. However it may be, we often see it suddenly arise, or become increased where it already exists, under the influence of some vivid emotion, some tormenting chagrin, some profound disappointment, anger, or sudden fright, etc. A lady, seeing an only daughter on the point of being torn from her by brain-fever, was suddenly inundated with a leucorrhœal discharge. A young girl, twenty-three years old, having seen her lover killed by some soldiers during a revolutionary outbreak, and owing her own safety to chance merely,

The brain and organs of generation, sympathy of.

Instances.

was immediately attacked with profuse fluor albus. Finally, I shall conclude what I have to say upon the causes of the disorder, by adding that it has been known to prevail epidemically, under certain states of the atmosphere. Epidemic leucorrhœa has been particularly observed during cold and damp weather; also during a drought and period of excessive heat, thus being developed by entirely opposite conditions of the atmosphere.

Whites sometimes epidemic.

Subacute leucorrhœa, which opens with inflammatory symptoms, and sometimes even with a feverish movement, begins with slight pruritus or itching, which is at first confined to the vulva, but soon extends itself to the vagina and womb. The patient feels dull pain in the hypogaster; sensations of heat and weight in the pelvic cavity; draggings in the loins, groins, and thighs. She is tormented by frequent desire to urinate, and sometimes by venereal desires. The voiding of the urine is frequently accompanied with some difficulty and a feeling of uneasy and painful heat. Finally, there is not unfrequently conjoined with these different symptoms a sensation of hysterical strangulation and spasmodic oppression at the upper part of the thorax.

Subacute leucorrhœa, diagnosis of.

The discharge, which is at first small in quantity, clear, serous, or sanguineous, especially if it follows hemorrhage of the womb, soon increases, becomes thicker, and presents a color which is variable, and may be white, of a milky character, yellow, or greenish. The secretion is sometimes so abundant that the female is compelled to guard herself, as during the monthly flow; — the spots on her linen are yellow or greenish, and give it a starched stiffness. Exploration by the usual means reveals to us

The discharge; character of.

that all the organs of generation are redder, more inflamed and sensitive than usual; that the neck of the womb is more dilated than in its normal state; finally, that the mucous membrane of the os tincæ and vagina is swollen, doughy, and sometimes even excoriated or slightly ulcerated.

Passive chronic leucorrhœa.

Passive chronic leucorrhœa, although succeeding often to the subacute form, may not only exist without presenting any inflammatory character, but may even depend primarily upon a state of general relaxation or local debility. The chronic leucorrhœal discharge resulting from this form is met with chiefly in lymphatic women and those of a loose fibre; and it is for this reason that the infirmity is much more common in cold and moist regions. It is equally frequent in women whose genital organs are relaxed by excessive labor or excessive venery. It co-exists ordinarily with green-sickness, amenorrhœa, and may be the cause, the effect, or index of a state of general debility and relaxation.

Peculiar appearance of chronically leucorrhœal women.

Women afflicted with chronic leucorrhœa, depending on debility of the organs of generation or of the general constitution, although possessing a vermilion tint, and seeming to enjoy good health, generally have a peculiar appearance, which may help to enlighten the physician and lead to a recognition of the disease; — the face and lips are pale, the eyes surrounded by a dark areola, the eyelids are often swollen, and finally, an expression of languor in all the features gives to their whole appearance an air of dejection.

Essential chronic leucorrhœa is never accompanied by signs of irritation of the genital organs; the period of the attack is almost always unknown,

no matter what the cause which may have produced it; its progress is very irregular, and its duration unlimited. As happens in the acute form, the color, consistence, and quantity of the discharge, vary in different cases; its amount is often very slight, and it is then a mere inconvenience, which attention to cleanliness prevents from becoming too disagreeable; at other times, it escapes from the vulva in sufficient quantity to keep the external genitals and the upper part of the thighs constantly wet, and to produce slight excoriations and superficial inflammations of those parts, which are easily prevented or dispelled by lotions and local bathings.

A mere inconvenience.

It happens, not unfrequently, that the affection is complicated with relaxation of the vagina, and falling or vicious inclination of the womb; but these lesions of situation, which increase the inconveniences of leucorrhœa, and which are betrayed by sensations of weight about the rectum and bladder, are rather the effects than the causes of fluor albus properly so called. When small in quantity, the discharge is commonly mucous, and hardly stains the linen; it has scarcely any odor, and the color is whitish, like that of whey. If, on the contrary, the leucorrhœa be abundant, the mucous discharge is commonly lactescent, or of a milky nature, and, from its color, and consistence, sometimes bears sufficient resemblance to milk, to have attracted credence to the so-called milk diseases.

Effect on linen.

Under these circumstances, the discharge, when dried, stiffens the linen, and leaves a grayish spot, deepest at its edges, very similar to that produced by mucous discharge from the nose. Sometimes the secretion has more consistence, and is flocculent and

even cheese-like when abundant, and especially when of long standing. Whatever be its color and consistence, it always occasions certain lesions, or injuries of the functions, and a great number of sympathetic phenomena. When abundant and of long standing.

The patients complain of weight in the lumbar and hypogastric regions; of vague sensations of weariness; of pains in the epigastrium, and of colic. They suffer from depraved appetite, from sourness of the stomach, nauseous vomitings, headache, frequent yawning and hiccough; the skin is cool, and sensitive to the least atmospheric change; they perspire but little; they complain of unusual heat in the head; of dizziness; of syncope, palpitation of the heart; excessive coldness of the feet; occasional pains under the left breast; the face becomes pale, the eyes hollow, and they weep without cause; they become careless, impatient, and feel a sort of languor and dejection, a sensation of strangling and choking, and an involuntary sadness; they are listless, melancholy, hypochondriacal; — in fine, they never exhibit the happy physiognomy characteristic of the sex, and are often tormented by amorous desires which drive them into vicious habits, and at the same time increase their languor and exhaustion. When menstruation becomes re-established in cases of amenorrhœa and green-sickness, the leucorrhœal discharge diminishes, or ceases entirely; — with it, disappear all the nervous symptoms; the paleness soon passes away; gayety returns; and the functions of the stomach, as well as the general health, return to their natural condition. Results of, on patient. Bad moral effect.

When the discharge is constant, profuse, and of long standing, exhaustion and sapping of the con-

Extreme case of whites

stitution, are soon found to be the unfortunate and necessary results of this discharge, which never ceases, and which seems to attract to itself the sources of all the other excretions, and thus to cause a drain upon the whole system.

The skin now becomes more and more discolored; the emaciation increases; the flesh becomes loose; the breasts are soft; the pulse small and frequent, and the breath bad; the eyelids become bloated; the legs are always cold; and the whole body sometimes becomes œdematous. The patient complains of almost continual colic; and of pains along the vertebral column, in the loins, hips, and hypogastric regions, or parts below the belly. She is tormented with constant thirst, the appetite is lost; she suffers from habitual pain in the stomach, and from obstinate costiveness; she is subject to nausea, eructions, and acid vomitings; the urine is turbid, flocculent, and in small quantity.

Renders life a burden.

When leucorrhœa reaches this degree of severity, the patient acquires a disgust and indifference for everything; her faculties become enfeebled; she is unfitted for reproduction as much by her indifference as by the disgust which she inspires; finally, moral debility and settled despair, together with hectic fever, exhaust the few remains of strength, after having destroyed all that lends a charm to life.

Confounding syphilitic discharges with whites.

It is possible to confound with essential leucorrhœa, discharges which depend upon a syphilitic taint, and it is, at times, difficult to distinguish them. Benjamin Bell placed the seat of syphilitic discharges in the canal of the urethra; while leucorrhœa is supposed to be seated in the vagina and uterus, and especially in the neighborhood of the urinary passage, and in the lacunæ, situated

between the nymphæ. Syphilitic discharges are accompanied with pain, which is said never to be present in leucorrhœa, and also by the sensation of heat and smarting while urinating. But these are not symptoms upon which a positive opinion as to the nature of the disease can be safely made out. The contagious property of the discharge, and its transmission by sexual intercourse, are not better calculated to discriminate syphilitic from leucorrhœal discharges; for daily experience shows that it is possible to cohabit with a woman having a syphilitic discharge, without contracting the same disease, whilst leucorrhœa may become so irritating as to communicate an acute blennorrhagia. The age, the moral character of the patient, and the antecedents, may likewise lead to error. The case of three little girls is recorded, the eldest of whom was only nine years old, and all of whom were supposed to have the fluor albus, or whites. Upon being interrogated, they disclosed enough to show that they had been venereally infected by some vicious domestics. In fact, medicine supplies no certain sign by which to distinguish gonorrhœal discharges from whites, properly so called.

Difference of venereal and leucorrhœal discharges.

In venereal discharges, there is always a certain amount of purulent matter, or pus, mixed with the proper mucous of the vagina. And the microscope discloses infusory animals in this matter. The discharge of true leucorrhœa is thick, creamy, and does not stick to the fingers; it reddens litmus paper, and seems to be composed of little oval bodies, having the appearance of scales from the mucous membrane. Finally, it never contains the infusory animalcules found only in syphilitic

discharges; and, besides, ammonia gives it a slimy and ropy consistence when it is mixed with pus, which does not occur in the contrary case. If the discharge proceed from cancer, an abscess, a polypous tumor, or any other organic affection of the womb or vagina, the fact can be ascertained by touch. The prognosis of leucorrhœa depends upon the cause, the duration of the discharge, its quantity, the complications, the strength of the female, her age, temperament; and, finally, the hygienic condition in which she may be placed. In general, the older the discharge, the less the chances of cure; — in women of advanced age, it is almost always incurable. If it seem to be hereditary and constitutional, or, finally, if it be complicated with scrofula, the progress of the disease is difficult to arrest.

Suppression of whites.

The suppression of the leucorrhœal discharge may take place suddenly, from the action of different physical causes, as the use of astringents, taken internally or applied to the genital organs; of emetics, of purgatives, cold baths, the application of ice, the intervening of another disease; finally, from the excessive use of quack remedies. The more abundant the secretion, the more dangerous is its sudden suppression. However, the number of disorders which are likely to follow such a suppression, I believe to be greatly exaggerated. Of one thing, the victims of this disgusting infirmity may be sure, that it is not in the nature of an emunctory, or drain, which is beneficial to health. Still, I do not mean to affirm that a sudden suppression of a discharge of long standing can occur without inconvenience. A true cure of whites can only be effected gradually, and

by restoring the system generally to its normal condition of health. It is all-important that the disease should be attended to; because, if left to itself, it may lead to unfortunate moral consequences. Cure gradual.

In the subacute form, we ought, especially if the disease be recent, and the female young and of full habit, to resort to general bleeding, which acts either as a derivative, or by lessening the fluxionary movement, which tends to localize itself upon the genital mucous membrane. It is necessary, however, to employ bleeding with prudence and care; else, instead of diminishing the general susceptibility, we might often produce weakness, and run the risk of turning a subacute leucorrhœa, near its termination, into a chronic and passive form of the disease. Treatment of subacute form.

Among the measures which serve to increase the effect of small, general bleedings, and which, in most cases, are sufficient of themselves to moderate or entirely remove the inflammation, I include a more or less strict abstinence; diluent, mucilaginous, and acidulated drinks; emulsions; and especially decoctions of hemp-seed with nitre; emollient and opiate injections; enemata, and poultices of the same nature, and continuous irrigations, made by means of a large, curved canula, introduced into the vagina. To avoid the irritating effect of a jet of the medicated fluid, I employ a tin, or gum-elastic canula, the end of which, being pierced with a great number of holes, contains a small sponge, with a ribbon attached to it, by which to withdraw and renew it, as often as may be necessary. If the local inflammatory symptoms refuse to yield to the measures now in- Small general bleedings. Dietetic treatment.

Application of leeches.

dicated, we may have recourse to applications of leeches about the margin of the anus, especially if there be hemorrhoids, or to the vulva, in cases of amenorrhœa. Finally, should the disease prove very obstinate, purgatives must be used, such as

Rhubarb.

rhubarb, which is at the same time purgative, tonic, and astringent.

Galen's method.

It was to the application of this derivative method, that Galen owed the brilliant success which spread his renown even to the palace of Marcus Aurelius. This celebrated physician of ancient times, by the use of purgatives, diuretics, and frictions over the whole surface of the body, very speedily cured the wife of Boethius, suffering from a profuse leucorrhœa, which the skill of the first physician of Rome had failed to relieve.

When leucorrhœa becomes chronic and passive, it is not a mere local alteration that we have to treat, but the whole system is to be modified and restored to its normal condition. The object we must then seek, is to dry up a morbid discharge, — which is, at one and the same time, the cause and effect of the general and local debility, — by reconstituting, so to speak, and giving tone to the various functions which are in a more or less perverted condition. To this purpose, experience

Gentian and cinchona.

has shown the efficacy of gentian, of rhubarb in small doses, and particularly of cinchona, which acts as a tonic, and perhaps, also, by interrupting the habit of the discharge.

The patient must co-operate with physician.

In spite of the careful employment of the curative means enumerated, leucorrhœa often resists the efforts of the physician, unless he be seconded by the patient, and by proper attention to hygiene. The regimen should be directed on the same prin-

ciples as the medicines, that is to say, it should be fortifying, without being irritating; the clothing must be warm, and flannel next to the skin ought to be recommended. I should advise a residence in the country, in a pure and healthy air, especially in the summer season, which means have been known to dispel a chronic leucorrhœa very speedily, which, however, has again appeared at the approach of winter, or on returning to the city. The patient must use all her endeavors to overcome certain inclinations and illicit habits, which are frequently the chief and unknown cause of her sad and disgusting malady.

Illicit habit must be overcome.

She should compel herself to take muscular exercise, without carrying it to fatigue; as this course will dispose her to take food, at first light and of easy digestion, and then more abundant and more substantial. I shall conclude by saying that the approach of the first menstruation, the pregnant state, and the critical age or change of life, are so many causes which should not be rashly interfered with. Prudence demands that we should wait until their influence is no longer felt; and that we should also respect the critical discharges, for fear of recalling the disease, of which they are the substitutes. It is not proper to cure leucorrhœa, except where it persists after the primary affection; and besides, we must always take the precaution to prevent, as far as possible, a relapse, by means of an issue and by the use of saline purgatives.

Such is a sketch of some of the resources of medicine in leucorrhœal discharges; the treatment of which would doubtless be more successful, if a bolder and more energetic curative treatment—always based, however, on reason and the nature of the disease—were resorted to.

CHAPTER XXV.

DISEASES OF THE WOMB, ESPECIALLY FALLING OF THE WOMB.

Why female sexual organs are more subject to disease than the male.

In general, I may remark, that the female sexual organs are more subject to disease than the male; because the female's share in the act of reproduction is vastly greater than that of the male, and imposes upon her organs of generation a most painful function. As the womb is an organ upon which most of the impressions, both physical and moral, made in the female are reflected; every disregard of the laws of health; and every circumstance, moral and material, unfavorable to health; such as an insalubrious climate; excitements and commotions of all kinds; illicit enjoyments; jealousy; disappointed love; a luxurious and improper diet; domestic chagrin; the artificial and stimulating life of great cities; sudden transports of joy or sorrow; the morbid emotions excited by the reading of current novels; in fact, all the violent passions, and every species of mental shock; — all these are detrimental to the womb and the causes of uterine disease.

The womb, the centre of impressions.

Effect of diseases of womb.

The first effect of diseases of the womb is to produce a prompt reaction upon both the physical and moral nature of the female. She becomes sad, melancholy, restless, and susceptible, and troubled with forebodings of ill. Those who live in a state of opulence, withdraw from society, or rush into

the vortex of company, as if to escape from an evil that they fear without understanding it, and which, from a sentiment of false delicacy, they permit to become so aggravated, that it unhappily too often gets beyond the reach of art; those particularly who are attacked with erotomania of the cervix uteri, soon find that their beauty and freshness are gone, and that the malady, which keeps even pace with their sufferings, both wrinkles and fades them.

I have adopted, as the caption or topic of the present chapter, diseases of the womb, and pregnancy, which in fact cover the whole ground of the sexual pathology of woman. Of course, the limits of a single chapter are inadequate to a thorough and exhausting discussion of subjects so extensive. The present chapter, therefore, will be little more than an enumeration and perfunctory definition of the diseases in question.

Faults of form and development of sexual organs.

In another chapter, I have briefly noticed the diseases of females which comprise all cases of faulty conformation of the sexual organs, whether dating back to birth or accidental; such as absence of the womb, imperforation of the vagina, excessive development of the clitoris, congenital opening of the vagina into the rectum or bladder, incomplete development of the womb, congenital occlusion or closing up of its neck, cohesion of the labia or lips, accidental development of any substance filling up the vagina, such as polypous, fungous or syphilitic excresences, rendering sexual union impossible, or extremely perilous, etc., etc. Colombat d'Isere classifies all the above diseases under the head of lesions of form and development.

The womb, in its natural state, being but loosely supported within the pelvis by means of its liga-

Displacements of the genito-urinary organs.

ments, is liable to a variety of displacements and deviations that affect its relations with the other portions of the genital apparatus, or with the viscera contained in the cavity of the abdomen. Hippocrates, who regarded an absolute state of celibacy (or abstinence from sexual union) as one of the principal causes of derangement of the monthly turns, and, consequently, engorgement of the womb, has said that women, in the conjugal state, and in whom the womb does not continue always empty, are less subject than virgins to disorders of that organ.

Displacement of sexual organs more rare in virgins than married women.

In this respect, the father of medicine is in error; for the displacement of the sexual organs is much more rare in virgins and barren women, than in those who are married and who have children. Where the displacements are slight, they scarcely occasion inconvenience to the patient; but when they are considerable and permanent, they are the more worthy of attention, as likely to result in inconvenience or accidents that get beyond the reach of medicine. Although too great mobility of the womb is attended with numerous bad effects, its immobility, if to a considerable degree, becomes also a disturbing cause as to the surrounding parts, and may prevent the womb itself from fulfilling some of its appropriate functions; such as pregnancy and labor, which require considerable changes of its situation.

Falling of the womb.

What is called, scientifically, *hysteroptosis*, and in common parlance, *falling of the womb*, is by far the most common displacement or lesion of situation of that organ; and, therefore, I shall devote myself principally to an account of this displacement, merely enumerating the other lesions of

situation. Falling of the womb is a displacement of it downwards, which may be complete or incomplete. In the former case, the womb escapes entirely from the pelvis, and may be seen completely outside of the vulva; in the latter case, on the contrary, it projects more or less considerably into the vagina, but does not descend below the inferior strait.

Falling of the womb may take place, not only during pregnancy and after delivery, but also while the womb is not pregnant; for it has been met with, even in virgins, in whom it is rare, because of the small size and lightness of the organ, and probably, also, because of the tightness of the vagina and surrounding parts.

Why rare in virgins.

There are three degrees or varieties of this displacement. In the first degree, which is merely a depression or incipient falling, the womb settles down into the middle of the vagina, which it enlarges, in order to make a lodgment for itself therein. In this kind of displacement, which is but a slight affection, but that ought to be speedily attended to, the patients complain of dull pain in the groins; they also complain of a sense of weight in the fundament, and a pressure that becomes more painful by long standing on the feet, and by too long a walk. In this variety of prolapsus, the neck of the womb is easily touched, and the vagina is completely filled up; while two-thirds of it are turned inside out, as if it were the finger of a glove. The projection may be easily raised upwards by the finger; but it falls down again, as soon as the finger is withdrawn, unless the womb has grown to the walls of the vagina.

First variety of prolapsus.

The second degree of prolapsus, or falling, is

produced by the pressure of the womb upon the bladder and rectum, or by the stretching of its ligaments. The symptoms are diminished by rest, and particularly by rest in the horizontal posture, whereas their violence is redoubled by standing and walking. When the second degree of displacement takes place suddenly, it is frequently accompanied with long fits of fainting, floodings, severe pain in the pelvis, vomiting, and sometimes with severe peritonitis. When it comes on slowly, the organs get used to the unnatural position, and so do not occasion such attacks of sickness. In-

Second variety.

A serious mistake.

complete descent of the womb may be confounded with elongation of the neck of the womb, fungous tumors of the neck, and particularly polypus of the womb, so that surgeons have been known to extirpate the womb itself, when they mistakenly supposed that they were going to extirpate polypus. By bearing in mind that falling of the womb is always easily reducible, and that polypus of the womb is not, this confusion may be avoided. The patient must be examined in a standing posture, because the falling is then greater than it is in the horizontal position, in which it may even wholly disappear. The examination should not take place until after an evacuation of the bowels and bladder.

An incomplete descent of the womb does not prevent conception. In a complete case of falling womb, where it protruded beyond the labia, the act of generation has been known to be consummated in the very cavity of the womb itself, and pregnancy followed. Whenever an incomplete falling of the womb becomes complete, then all the symptoms caused by the compression of the blad-

der and rectum immediately diminish, and the evacuation of urine and by stool take place without difficulty.

The third degree of prolapsus.

In this variety, the entire body of the womb has passed out beyond the vulva; and the whole organ, which is seen movable and suspended between the woman's thighs, has dragged down in its fall, not only the vagina, which is inverted, but also its appendages, the bladder, and a portion of the rectum. The displacement of these organs soon forms a *cul-de-sac* (or passage without an exit), filled with the convolutions of the small intestines, giving rise to another swelling of greater or less size, which prevents the reduction of the womb itself. The distance to which the womb projects outside is equal, in some cases, to six, eight, or even ten inches; and the tumor is either strangulated, oval, or globe-shaped, but most commonly, it is in the shape of a cone, and fills up the whole orifice of the vulva, whose labia seem lengthened by the presence of a foreign body, which keeps them always open and apart. It sometimes happens, that the womb thus displaced becomes affected with violent pain, and gives rise to copious hemorrhage; the tumor that it constitutes, from being always wet with urine, and irritated by the constant friction of the thighs and dress, becomes inflamed, excoriated, and indeed, wholly or partially gangrenous. Girls thus afflicted have passed for hermaphrodites, or persons of ambiguous sex.

The case of a woman is on record, who, in order to excite pity, and procure more abundant alms, had imitated a falling of the womb by means of a bladder, half filled with air and begrimed with

blood, which she adjusted by means of a sponge attached to it, and introduced within the vagina.

Exciting and predisposing causes.

Displacements of the womb are most frequent and easy to be brought about in the first days that follow child-birth, especially in women who have been delivered while standing up, or who have risen too soon after lying-in. An exciting cause is being too much on the feet, walking too much, and violent exercise shortly after confinement. Repeated pregnancy is a predisposing cause; scirrhous tumors formed in the womb; the abuse of sexual intercourse; chronic leucorrhœa, etc., and pressure on the lower belly by the dress; jolting in a carriage; straining at stool or in vomiting; in passing the urine; in coughing, sneezing, singing, dancing, riding on horseback, and skating; and abortion, and violent labor-pains, — are also exciting causes.

When left to nature alone, a falling of the womb may soon become quite incurable, for its tendency is always to increase; and the chances of success are always more unfavorable, as the case is of longer date, the descent greater, and the attending circumstances more disadvantageous. Where the complications become too great, the physician is impotent, and can only suggest palliations.

Treatment.

There are two kinds of treatment; first, to replace the organ in its natural situation; and, second, to prevent the recurrence of the displacement. For the most part, it is an easy matter, where the falling is in the first or second stage, and unaccompanied by any complication, to restore the womb to its natural position.

Attitude of patient.

The patient lies upon her back, so as to have the pelvis somewhat higher than her head, and the womb is gently

pushed by the introduction of two fingers, towards its proper place in the cavity of the pelvis. Cold astringent injections should be used after the reduction.

Concealment through false modesty; effect of.

No feeling of false delicacy should lead women to conceal this disgusting and painful infirmity from the notice of the physician. There are cases of women who have concealed it, and even to an advanced age, without any very serious symptoms; — but ordinarily, the malady, if unattended to, becomes aggravated; the sufferings of the patient increase daily; and a simple depression soon becomes a positive falling, and, finally, a complete case of prolapsus in the third degree.

The pessary.

There is an instrument designed to be placed in the vagina, either to maintain the reduction of a hernia in the part, or to prevent the falling in, or inversion of the organ, or, what is most commonly the case, to prevent the falling and deviation of the womb itself. The use of the pessary in the treatment of displacements was much more frequent among the ancients, than it is among the moderns, with whom it has fallen mostly into neglect. The ancients made the pessary of wool, the leaves of plants, lint, or linen, rolled, to which they attached a string, for the purpose of extracting it when necessary. Dr. Meigs, while admitting that great abuses are to be met with in the prescription and use of this instrument, affirms that there are a great many women, who can enjoy neither health nor comfort without the aid of artificial supporters of the genito-urinary organs. The pessary should be anointed with oil. Pessaries are made of a piece of cork, cut in a proper form, and repeatedly dipped in melted wax. Others are made

of glass, blown into convenient size and form: and others are metallic, namely, silver, or a silver globe, gold-washed. Such artificial helps excite irritation and are liable to corrosion.

My limited space will only allow me to enumerate by name the other displacements of the womb, namely, anteversion, retroversion, anteflexion, retroflexion, inversion, obliquity, elevation, and immobility, of this organ; hysterocele, and all the hernias of the womb and ovaries, etc. There are diseases of the external and internal organs of the female, arising from contusions, wounds, and lacerations, and fistulas, and the accidental introduction of foreign bodies into the cavities of these organs.

Wounds and lacerations of the organs.

The external sexual parts, to wit, the mons veneris, the labia majora, and perineum, are exposed to contusions, wounds, and lacerations which may result either from a fall, a wound, or a blow; from the first attempts at sexual intercourse; or from the effects of criminal copulation. The disorders depending upon the latter cause are the more severe in proportion to the resistance the female has made, the disproportion between the organs of the two sexes, whether the violence has been done to a virgin girl, and especially whether she still be far from her full development.

Rupture of the perineum.

The perineum is frequently ruptured by childbirth, which takes place sometimes in the most natural labors, but much more frequently when the woman is delivered without assistance, after imprudent operations, and after awkward attempts at delivery with the forceps.

Rupture of vagina.

The vagina is exposed to rupture during labor, and also to lacerations and perforations produced by wounding

bodies or by external violence. There are cases recorded of young women who have been ruptured in this way, on the first night of marriage, with fatal consequences. When empty, the womb being movable and concealed in the pelvic cavity, is very rarely injured by external violence or wounding bodies.

Presence of foreign bodies in vagina.

The presence of foreign bodies in the vagina causes more or less violent inflammation, severe pain, ulceration, foul discharges, hectic fever, etc. There are cases recorded of a pomatum-pot, a needle-case, and other foreign bodies, being introduced into the vagina criminally, or through idiocy or childish curiosity, or in cases of nymphomania to produce a titillation. After extracting such bodies, warm bathing, narcotics, and antispasmodics, and local blood-letting are resorted to.

Vital and organic diseases.

A whole class of diseases, to which the female genital organs are subjected, arise from deep-seated inflammations, syphilitic excrescences, venereal chancres, fungus, tumors, dropsy of the ovary, hydatids or spurious pregnancies, cancer of the breast and womb, encysted tumors, etc. Diseases of the female genital organs, arising from derangements of menstruation or the monthly flow, and from chlorosis or green-sickness, nymphomania, and hysteria, are treated of in this work in chapters specially devoted to them. These are functional disorders.

A separate chapter will be devoted to what Colombat denominates lesions relative to reproduction, or diseases or lesions and sympathetic phenomena produced by conception, pregnancy, labor, and lactation.

CHAPTER XXVI.

DISEASES OF PREGNANCY.

I have already considered the subjects of abortion, or miscarriage, and barrenness, which naturally fall under this head, in separate chapters; and to do full justice to the accidents, and all the sympathetic phenomena of conception, pregnancy, labor, and lactation, would require many chapters. But the writer aims rather at a comprehensive, popular treatise for the general reader, than at a purely scientific, minute work, overloaded with tedious details, which would only be useful or interesting to the professional man and practitioner. The writer's object, in producing the present work on the physiology and pathology of the female genital organs, has been to present the public with a luminous and readable book, in which, while nothing important in the way of explanation or advice should be omitted, the reader should not find himself or herself repelled and perplexed by prolixity of discussion and technical details. If I have succeeded in popularizing the physiology and pathology of the sexual organs, I have attained the goal which I had in view at the start.

The author's aim.

I will now give a comprehensive glance at some of the disorders of pregnancy; and, first, of false pregnancy. This term comprehends a variety of affections that may simulate true pregnancy. It

False pregnancy.

is unquestionable that the stoppage of the monthly turns may give rise to the symptoms of pregnancy, such as enlargement of the breasts, nausea, vomiting, etc. Under these circumstances, to commit an error is so easy, that there are, perhaps, few medical men who have not witnessed, or even been subject to, such mistakes. Pregnancy has been mistaken for and treated as dropsy. A woman has exhibited all the signs of pregnancy, but after the lapse of nine months, was delivered by flooding. Another woman, fifty years of age, believed herself pregnant, engaged a midwife to stay in the house with her, and had the baby-clothes ready, — but her supposed pregnancy ended literally in a discharge of gas.

Cases of supposed pregnancy.

The collection of symptoms known as nervous pregnancy, or hysterical pregnancy, which generally depends upon some spasmodical affection of the abdominal viscera, and sometimes upon a chronic inflammation of those organs, is the form of false pregnancy most commonly met with; and, moreover, the one that most generally gives rise to mistakes. For the most part, it is met with among women approaching the change of life; in women accidentally affected with stoppage of their monthly flow, who are nervous, irritable, hysterical, and particularly in the unmarried; further, in widows, who imagine themselves pregnant by a second husband, and in those who, having lost their first children, are extremely anxious to have them replaced.

Nervous pregnancy.

It is a well-known historical fact, that Queen Mary of England, Bloody Queen Mary, as she is styled by Protestant historians, after her marriage with Philip II., of Spain, in her anxiety to have an

heir, insisted that she was pregnant, and made preparations for lying-in. But her imagination and the wish, which was mother to the thought, led her astray. With all women laboring under such hallucinations, the abdomen swells; the menses cease to appear; nausea, disgust, enlargement of the breasts, and, in many cases, all the usual signs of pregnancy appear, so as, indeed, to impose on skilful accoucheurs. From the fifth month onwards, the careful exploration of the womb generally, but not always, serves to remove doubt, and dispel the illusion of false pregnancy. "For my own part," writes Dr. Meigs, "I have but one rule of action; and that is, to admit very candidly my inability to decide, when I have not the clear and undeniable signs of a pregnant womb."

Depraved conception.

There are other kinds of false pregnancy which arise from a conception natural at the commencement, but the product of which has been changed as to its nature under the influence of some cause of diseased action, and has still further changed after the death of the embryo child. These depraved conceptions are called Moles, from the Latin, *mola;* which means mass, and signifies an organized, fleshy, insensible body, generally softish, sometimes hardish, of variable and indeterminate shape, which, after having been begun, and having been developed within the womb, is, instead of a fœtus, sooner or later, expelled from the cavity of the organ. Moles have been confounded with polypus, and with the various other tumors that are produced in the womb; yet there is one very important difference that distinguishes them, which is, that moles are always the result of depraved conception, and products of generation disturbed

Moles.

in its formation and altered in its composition; while other tumors are parasitic bodies, developed spontaneously, and without any clear, appreciable causes.

It was long supposed that the genital act is necessary for the formation of a mole. The ancient opinion was that a mole consisted of a mass of flesh developed in the womb, in consequence of an imperfect conception; — at the same time, the ancient medical authorities speak of certain bodies that grow within the womb, in strong, robust girls; and one of them avers that some women produce moles without the intervention of the husband; and it has even been pretended that a voluptuous dream has often sufficed to give rise to a mole in the womb of a young girl. The great French physician Velpeau recognizes the possibility of the mole in a virgin; but regards such cases as very rare. Ridiculous prejudices used to prevail on the subject of moles which some medical men promoted by their marvellous histories of live moles, and fantastic animals, living or dead, brought into the world by women. It is claimed by some authorities that there are true and false moles; that is to say, some are supposed to be the result of abortive conception; while others form spontaneously, and without any appreciable cause. Whatever may be the supposed value of these opinions, it is at present generally admitted by pathologists and accoucheurs, that a mole is the result of a conception, that has become depraved from some cause, and which is called a false germ, or embryo mole, where the product does not remain more than two or three months in the womb, and besides, exhibits the usual envelopes of the ovum, which latter, though always thicker and

True and false moles.

more dense than the healthy ones, are yet filled either with a transparent or a bloody fluid, amid which are discovered the early lineaments of the embryo. False germs, then, differ from fleshy moles, only as to the longer sojourn of the latter in the womb, and as the membranes are both thicker and more consistent.

A mole has often been found to co-exist in the womb with the fœtal child, and at the conclusion of the term of pregnancy, after the birth of the child, has come away either immediately or in the course of a few days afterwards. In some cases, such a mole produces abortion. Moles have been known to remain for years within the womb. The

Causes of moles obscure.

causes of moles are very obscure; but it is ordinarily supposed that they may be produced by any cause capable of disturbing the development of the new being; such as a sudden fright, or a lively emotion experienced during the genital act, or in any of the early days of pregnancy.

A bad quality of the semen, and intercourse during the monthly turns, have also by some been looked upon as capable of giving rise to depraved conception. A conception of this kind is attended by the same symptoms as a genuine pregnancy; viz., by stoppage of the menses, swelling of the breasts and belly, disgusts, nausea, and disorder of most of the functions. After the mole has remained some months in the womb, it causes the abdomen to become larger than it is in real pregnancy, at the corresponding stage; it is generally more painful, harder, and more evenly distended. There is no spontaneous motion as of the quick fœtus. The weight of the womb appears to be greater and more fatiguing than when it contains a fœtus;

and the woman suffers from pain in the loins, from difficulty of passing the urine, and from lassitude, more than she does in an ordinary pregnancy, also feels something like a ball falling about within her, as she turns from side to side.

The breasts, which were first enlarged, finally shrink, and instead of milk, a serous fluid is secreted; and, lastly, occur frequent irregular attacks of uterine hemorrhage.

Generally speaking, and after the first five months of symptoms like the above, where the signs of true pregnancy are not to be found, and where the local uneasiness as well as the floodings continue to increase, we are authorized to suppose the symptoms derivable from the presence of a foreign body within the womb. When the mole has attained its maturity, which is generally the case from the fourth to the seventh month, the patient suffers pains like those of real labor; the womb contracts, its orifice becomes dilated, and the mass is expelled. The breasts then fill with milk, and all the other secondary symptoms take place, as in a common lying-in. Formerly, it was supposed that a mole must be got rid of as soon as possible by means of more or less violent agencies. But such a treatment is dangerous, because there is risk of mistaking a true pregnancy for a mole. The treatment for the most part requires nothing particular; we should wait until nature expels the foreign body, and then extend the same care, and make use of the same precautions, as in an ordinary accouchement. The treatment.

The diseases connected with pregnancy are either seated in the womb, or depend upon the influence of that organ on the different functions

of the rest of the bodily organs. I have already treated of abortion, or miscarriage, both induced and that which is brought about by various derangements and disorders; I will now briefly glance at the various affections which most usually accompany pregnancy.

Salivation. One of the first signs of pregnancy is an excessive secretion from the salivary glands, far more inconvenient than dangerous.

This abundant flow of saliva generally appears soon after conception, and ceases commonly towards the fourth month; but, in some cases, lasts until the end of pregnancy, or even does not make its appearance until a short time before labor. When the salivation is slight, it is to be left to nature; but though it be dangerous to arrest the secretion suddenly, especially when the quantity is very great, it is wise to moderate the amount, when it produces debility of the patient and derangements of digestion. All that is commonly necessary, is to keep the bowels open by laxative drinks, by fluid magnesia, and by substantial and digestible food.

Toothache of pregnant women. Pregnant women are subject to toothache or a dental neuralgia, which commences, with more or less violent pains confined generally to the lower jaw. If the ache is owing to caries, or decay of a tooth, the pain is confined to the diseased tooth; otherwise, all the teeth of one or both sides of the jaw are painful. The aching is sometimes so violent, that it extends to the whole face, following the course of the branches of the seventh pair of nerves. There is neither swelling, heat, throbbing, nor any trace of change of tissue, in toothache of this kind, as happens when the pain of the teeth depends upon inflammation. There

are various remedies for this kind of toothache, such as subcarbonate of iron, combined with rhubarb, and the application of a plaster of opium over the course of the diseased nerve. When the toothache depends upon the decay of the tooth, this must be promptly extracted, unless the female is so irritable, as to make us fear abortion; in which case, treatment must be resorted to, to alleviate the pain, and antispasmodic remedies be used both internally and externally.

Disgust for food is often observed in pregnant women, especially in the early months. In some cases, it exists in regard to some kinds of food only, but generally includes all descriptions. This loathing of food may be caused, either by a nervous condition of the stomach, by derangement of the bowels, or by a state of fulness, which latter is met with in women of strong and sanguine constitution. It is generally unnecessary to do much for this affection, as it commonly ceases after the fourth month of pregnancy; when it lasts longer, it becomes, in some cases, a means employed by nature to prevent plethora, or fulness. Besides, the want of appetite seems to have but little influence in some women, as they bear well-formed children, and retain their plumpness and freshness through the whole of the pregnancy.

Though we generally find that pregnant women lose their appetite and take disgust to all kinds of food, there are some, who, during pregnancy, have an unnatural appetite. This species of affection, which often gives rise to vomiting and difficult digestion, and which becomes sometimes a necessity so imperious as to amount to delirium, often yields to the employment of nourishing liquids,

Disgust for food.

Extraordinary appetite.

such as broths, rice-milk, and chocolate; or else to the use of substances containing a large amount of nutriment in a small space, among others, animal jellies, or eggs in shell. The hunger may likewise be allayed, when excessive, by morsels of chocolate or sugar. The use of mineral waters, of the ferruginous kind, is beneficial.

Dyspepsia and excessive thirst.

Pregnant women are liable to dyspepsia; that is, they experience, after eating, a sensation of fulness and distension, usually accompanied by general uneasiness; by more or less thirst, and sometimes by nausea and vomiting. This affection is favorable, for it commonly begins with pregnancy, and disappears after the fourth or fifth month. Sometimes, however, it does not appear until the later months; but ceases, in that case, with the pregnancy. In all cases, it seems to exert but little influence upon the health and development of the child. The treatment of the disorder is very simple; it consists in the employment of the bitter medicines, such as the infusions of gentian, mint, rhubarb, and especially of chamomile. The action of these remedies is assisted by the use of mineral waters, mixed with a little wine; and by soups, white meats, and very ripe fruits. If the dyspepsia be brought on by excessive drinking of fluids to quench an excessive thirst, it may be remedied by a few grains of nitre in lemonade, taken frequently, and in small quantities at a time.

Capricious appetite, and longings of pregnant women.

The longings of pregnant women are as variable as they are numerous. Some are tormented with a desire not only to eat substances not included in the list of food, but those of the most disgusting character even. I have seen women, who, though usually dainty and fastidious, have become affected

with a depraved appetite, and who longed to eat chalk, plaster, cinders, charcoal, green fruits, vinegar, strong liquors, suet, caterpillars, flies, spiders, and even excrement. It may be said of pregnant women, in this connection, that there is no accounting for their tastes. Singularities of the above kind, which are also observed in hysterical and chlorotic women (or those affected with green-sickness), and in those who have suppressed or irregular menstruation, are quite frequent in the early months of pregnancy, and commonly cure themselves.

In general, it has been remarked, that whatever be the substances introduced into the stomach, in this condition, no evil has resulted; which, to a certain extent, permits us to suppose that it is nature which inclines the woman to introduce into her system materials necessary for her new physiological condition. Without crediting the marvellous stories about marks on the unborn child, and deformities said to be occasioned by the strange longings and caprices of pregnant women, I am of opinion that there is no good reason for denying them anything, or for refusing to yield to a strong appetite, unless, indeed, the things longed for are manifestly hurtful. It is readily conceivable, that a disappointed wish and ungratified longing, carried to a certain extent, may produce dangerous consequences to the mother, and thus interfere with the formation and development of the embryo child.

The disease is often left to itself, because it almost always yields after the first months of pregnancy, and generally relates to substances that do not prevent the female from taking other nourishment and enjoying comfortable health.

Burning pain in stomach.

There is another affection of pregnant women, which consists in a feeling of burning pain in the stomach, with the rising into the mouth of an acrid fluid, that produces a very painful sensation of heat throughout the œsophagus, and even in the mouth. It commonly occurs in persons who use food that is heavy and difficult of digestion, — as fried dishes, salt meats, old cheese, and alcoholic liquors. In pregnant women, it generally occurs in the first months of pregnancy, without our being able to assign it to any other cause than the sympathetic influence of the womb upon the stomach. It occurs in the early periods of conception; it ceases towards the fourth month; and when it comes on in the latter period of pregnancy, it terminates with the delivery. Magnesia and lime-water may be administered during the attacks, and extract of valerian and opium by way of anodynes.

Treatment.

Difficulty of swallowing.

Difficulty of swallowing, accompanied by spasmodic contraction of the œsophagus, and by the sensation of a body arrested in the throat, is a phenomenon often produced by the sympathetic influence of the womb in pregnancy. I have cured this trouble by giving to the patient a little cherry brandy, rum, or anisette, mixed with water.

Heart-burn.

Heart-burn is a very common indisposition in pregnant women, especially in blondes and those of a lymphatic temperament. It is a frequent symptom of dyspepsia; but, in the greater number of cases, results from a vitiated taste, since the patients find all their food to be sour, or else, which is still more common, it is produced by acids actually existing in the stomach.

Cinchona, gentian, and rhubarb are good remedies for this affection. I prescribe also, in order

to neutralize the acids of the stomach, alkaline substances, magnesia, etc. To these means should be added a tonic diet, — roast meats, nourishing soups, moderate exercise, and residence in the country, or, at least, in a dry and temperate air.

Nervous colic.

Pregnant women are also liable to nervous colic, or cramp of the stomach, which is characterized by acute pain, and by a feeling of dragging and laceration at the epigastrium. Constipation is very common in pregnant women, especially towards the end of pregnancy. It is generally caused by the pressure of the enlarged womb upon the colon and rectum, whence results difficulty in the passage of the fœcal matter.

Constipation.

Pregnant women are also subject to more or less frequent evacuation of mucous, serous, and bilious matter. When the evacuations are mixed with blood, the attack takes the name of dysentery. When there is a constant, painful, and nearly unavailing desire to go to stool, accompanied by burning heat at the fundament, it is called tenesmus.

Tenesmus.

Difficulty of breathing is also another affection to which pregnant women are liable. As I have said, all the principal organs are liable to be sympathetically affected by the womb. When the lungs are affected in this way, there is a cough, especially during the early months of pregnancy. The hemorrhages which take place from the womb during pregnancy are frequent and dangerous. Spitting of blood is one of the most dangerous complications of the pregnant state. In this state,

Various other affections.

the patient is sometimes troubled with palpitations of the heart; that is, with tumultuous movements, and with stronger impulse than ordinary. Then there is a complete and generally sudden loss of

sensation and motion, with suspension of breathing. This sort of temporary death, which generally lasts only four or five minutes, recurs periodically in certain women, once a month, once a week, once in every two or three days, and even oftener.

Vertigo, or dizziness, also complicates pregnancy, in consequence of a nervous state of excitement. "A severe headache in a woman advanced in pregnancy," says Dr. Meigs, "should be taken as a sign that she ought to be let blood." Sleeplessness is one of the most distressing affections to which the pregnant female is liable, especially those of a nervous and delicate constitution. Pregnancy also causes disorders of the senses, of sight, hearing, smell, etc. It also, at times, disorders the understanding and moral inclinations and affections. Women have been known to become thievish, poetical, or musical, from being pregnant, etc. Puerperal mania sometimes lasts as long as life. Puerperal convulsions were called by the Greeks flashes of light. They are a species of epileptic attack to which pregnant women are subject during pregnancy, in labor, or after having been recently delivered. Puerperal fever is one of the most frequent and dangerous diseases which occur after labor.

Hygiene of pregnancy and lying-in women.

I will close this chapter with a few words on the hygiene of pregnant and lying-in women. While a pure air is of the highest importance to health at all periods of existence, it is during the pregnant state especially that it becomes indispensable. Pregnant women ought to breath an atmosphere which is pure and exempt from extremes of all kinds. Their clothing should be loose, avoiding all pressure upon the breasts, chest, abdomen,

and stomach. After the birth of the child, a calm state of mind and rest for the body are indispensable. The ancients were so well convinced of the use of this precept, that at Rome, even the magistrate had no right to enter the house of a lying-in woman, to execute a sentence. Juvenal says, that, in order that all the citizens might respect this asylum, it was necessary merely to suspend a garland at the door. The visits of friends, neighbors, and acquaintances, ceremonious visits, and calls of relatives, are among the frequent causes to which may be attributed a variety of diseases of the lying-in woman, that lead to the most serious consequences.

Time of lying-in.

The time that a woman ought to remain in bed is necessarily very variable. In some instances, six days are sufficient; whereas, in other cases, fifteen or even twenty days, are indispensable, particularly where there is a tendency to falling of the womb, and where the general health is precarious. Furthermore, the first trial of sitting up should not be protracted beyond half an hour, or an hour at most, upon a couch or sofa.

CHAPTER XXVII.

THE NERVES, AND NERVOUS DISEASES.

"Canst thou minister to a mind diseased?"

SHAKESPEARE.

I will close this volume with a few general remarks on the nerves and nervous diseases. The nervous system is said to be predominant in Americans. This is, in fact, the land of delicate nerves and morbid nervous phenomena. Having made the treatment of nervous diseases in both sexes a specialty, I have been in a situation to learn the great prevalence among my countrymen, and especially my countrywomen, of morbid, or diseased nerves. The nerves are the most delicate and mysterious part of the human body. They mediate between mind and matter, between spirit and organization. Each man and woman contains a complete system of telegraph wires and batteries, through which information is conveyed from one part of the body to the other. The brain is a great nervous battery, to which the nerves of the rest of the body bring reports in the shape of sensations, and from which they receive mandates. The nerves are the seat of pain and pleasure both, and of intelligence also. Without them, the body would be a dull, inert clod.

The nerves of touch, sight, taste, smell, and

hearing, bring us into connection with the outer world, with all its manifold sounds, sights, and objects of beauty and sublimity. Without the sentient system of nerves; without, for instance, the optic and auditory nerves, it is obvious that this world would be a land of darkness and silence. Strong, healthy nerves, keenly alive to sensation, give a man genius and intellectual power. They make all his thoughts and emotions vivid, and impart to his language eloquence and expressiveness. The muscles are mere pulleys, set in motion by the nerves. The nature of the nervous system is a profound physiological mystery, as well as the power which operates through it.

It is the nerves which are brought most into play in all the leading professions and avocations of life. There is a constant expenditure of nerve-force. The merchant, the lawyer, the editor, the military leader, the statesman, the physician, the skilful mechanic and inventor, the managers of great corporations and companies, organized for manufacturing or transportation, the broker, the banker, in fact, all the busy and leading men of this busy age and country, "travel," to use a slang phrase, not "on their muscle," but on their nerves. In fact, there never was a country or a period when nerve-power was so much in demand and use. What is the result? Our too eager business classes, who are ambitious for wealth and political preferment, and reckless of the laws of health, are smitten to an alarming extent annually with nervous diseases, with paralysis, and softening of the brain, which reduce multitudes of our most energetic men every year to helplessness, insanity, and idiocy.

Woman is ever the creature of sensibility, of delicate nervous organization. She feels, rather than reasons. She sees with a sort of clairvoyance. Our American women are of proverbially delicate organizations. The readers of the present volume will remember the superhuman strength which the hysterical malady (a nervous disease) imparts to the feeblest female. I will simply say to the hosts of persons, of both sexes, whose nerves are jaded and unstrung, and unequal to the exigencies and demands of every-day life and business, that I have had the advantage of the instruction of one of the greatest living French neurologists, whose cures of nervous affections have been of the most astonishing description, and whose name is known world-wide. His methods of cure I have for several years put in practice, in the cases of multitudes of patients, with signal success. Hence, I can, with confidence, invite all afflicted with nervous debility to a trial of my remedies.

DR. HAYES'S YOSEMITE PANACEA.

Dr. Hayes, while travelling, several years since, in the western part of this continent on a tour of relaxation, visited the famous Yosemite Valley; the great picture of which, by the distinguished artist, Hill, has been seen and admired by so many myriads.

This valley is shut in by stupendous walls of granite, — walls, over whose perpendicular precipices, waterfalls tumble headlong two thousand feet or more. While admiring the unique scenery of this valley, Dr. Hayes was struck by the peculiarities of its vegetation, which is extremely rich and luxuriant. His botanical knowledge led him quickly to perceive that there were hidden medicinal virtues of the rarest quality in the flora of this famous Californian valley.

The valley has, in fact, always been a great resort from time immemorial of the Indian medicine-men. Dr. Hayes secured a large quantity of the Yosemite herbs in highest esteem among the Indians, and from them prepared a panacea, which he has found invaluable as a tonic and restorative in some of the most common and debilitating diseases of females; such as whites, suppressed menses, barrenness, falling of the womb, general debility, chlorosis, or green-sickness, etc.

The Yosemite Panacea is prepared with the utmost chemical skill, and its health-restoring properties are something wonderful, restoring the bloom to the cheek of the chlorotic invalid, and the languid victim of menstrual difficulties.

The flora of California is peculiarly rich in medicinal virtues from the very quality of the soil. The Yosemite Panacea, which is purely an essential extract of the virtues of certain medicinal plants of the Pacific Coast, known to, and used for ages by the Indians, is its own sufficient recommendation. It has given health to hundreds already. As a medicine, it is as agreeable as it is healthful. It is prepared without regard to expense of ingredients or preparation.

Price, from fifteen to thirty dollars, according to strength and quantity. Sent, securely and safely packed, to all parts of the country, on receipt of price. Address, THE PEABODY MEDICAL INSTITUTE, or DR. A. H. HAYES, No. 4, Bulfinch Street, Boston, Mass. (opposite Revere House).

N. B. — All letters of consultation must contain five dollars, or a P. O. order for that amount, and a distinct name and address accompanying each communication, otherwise, no notice can be taken of them.

PRESCRIPTIONS.

---

121. ℞ Acidi Hydrochlorici diluti,
Acidi Nitrici diluti, ana f℥j.
Extracti Taraxaci, ℥j.
Infusi Gentianæ comp. f℥vij.
Mix: make a mixture, of which take two tablespoonfuls twice daily, before taking food.

In Dysmenorrhœa and Amenorrœha.

122. ℞ Acidi Nitrici diluti,
Acidi Hydrochlorici, ana f℥iss.
Syrupi Zingiberis, f℥ss.
Tinct. Aurantii, f℥ix.
Mix: take a teaspoonful in a wineglassful of water, on an empty stomach, twice every day.

124. ℞ Acidi Hydrochlorici diluti,
Acidi Nitrici diluti, ana f℥j.
Liquoris Taraxaci, f℥j.
Infusi Cinchonæ flavæ, f℥vij.
Make a mixture, of which take two tablespoonfuls twice a day, before taking food.

In Dysmenorrhœa.

125. ℞ Acidi Nitrici, f℥ij.
Acidi Hydrochlorici, f℥iij.
Aquæ destillatæ, f℥viij. **Mix.**
For sponging the body, add f℥iij. of the above to Oj. of warm water, and apply it for a quarter of an hour.

As a foot-bath, add 6 ounces of the acid to 2 gallons of water, in a deep wooden or earthen vessel; and while the feet are in the bath (the temperature of which should be 96° or 98°), the inside of the legs, and thighs, and arms, and the right side over the liver, should be sponged alternately. This should be continued for fifteen minutes, morning and evening. An aperient draught of salts in a bitter infusion should be taken every second morning.

In chronic Affections of the Liver.

126. ℞ Acidi Nitro-muriatici, ʒj.
Adipis preparati, ʒj.
Mix with a *wooden* spatula, and add
Olei Terebinth. rect. ʒij. Mix: make a liniment.

As a Rubefacient in Chest Affections.

130. ℞ Acidi Phosphorici diluti, ʒj.
Decocti Hordei, Oij. To be used as an ordinary beverage.

In Diabetes.

131. ℞ Acidi Phosphorici diluti, ʒj.
Decocti Salep. (*vel* Avenæ), ʒvj.
Syrupi Rubi Idæi (*vel* Mori), ʒss.
Mix: a spoonful every two hours.

In Caries, Salivation, and Hæmorrhage.

134. ℞ Acidi Phosphorici dil. fʒss.
Infusi Uvæ Ursi, fʒiss.
Make a draught, to be taken twice a day.

In Mucous Urine, with copious earthy excretions.

135. ℞ Acidi Phosphorici dil. fʒss.
Infusi Chimaphilæ, fʒiss.
Make a draught, to be taken twice a day.

In the same case, when the Kidneys are inactive.

136. ℞ Acidi Phosphorici dil. fʒss.
Inf. Pareiræ, fʒiss. Make a draught.

In the same, with opaque mucus.

137. ℞ Acidi Phosphorici dil. fʒss.
Infusi Buchu, fʒiss. Make a draught.

In the same, with inaction of the Skin and Kidneys.

141. ℞ Tincturæ Acidi Saliculosi, gtt. xx.
Syrupi Menthæ piperitæ, ʒj.
Aquæ Hyssopi, fʒvj.
Mix: a spoonful to be taken every hour.

In Dropsy.

174. ℞ Extr. Aconiti Alcoholici, granum unum.
Pulveris Glycyrrhizæ, gr. xij.
Syrupi simplicis, q. s. Mix: make into six pills.

175. ℞ Extracti Aconiti, gr. j.
Antimonii Oxysulphureti, gr. j.
Magnesiæ, gr. x.
Mix: make a powder, one to be taken every four hours.

In Rheumatic Pains, &c.

176. ℞ Extracti Aconiti, ʒss.
Vini Antim. Potassio-tart. ʒss.
Mix: from 15 to 20 drops to be taken three times a day.

In Painful Gout, with Fever.

177. ℞ Extracti Aconiti, gr. xx.
Tincturæ Guaiaci, ʒij
Vini Colchici sem. ʒss.
Mix: fifteen drops to be taken three times a day.

In Chronic Gout.

179. ℞ Extracti Aconiti Alcoholici, gr. ij.
Myristicæ Adipis, gr. xviij.
Misturæ Acaciæ, q. s.
Make into a mass: divide into six pills, of which one may be taken every sixth hour.

In Chronic Rheumatism, &c.

180. ℞ Extracti Aconiti, gr. j.
Guaiaci Resinæ, gr. viij.
Olei Cajeputi. q. s.
Make into two pills: take one, night and morning.

In Rheumatism, &c.

190. ℞ Aconitinæ, gr. v.
Olei Olivæ, ʒss. Rub together, then add
Adipis præparati, ʒviiss.
Olei Bergamii, ♏x.
Olei Santali, ♏ij. Make an ointment.

In Neuralgic Rheumatism.

196. ℞ Ætheris Sulphurici,
Liquoris Ammoniæ, ana fʒss.
Misturæ Camphoræ, fʒx.
Tinct. Cardamomi comp. fʒj.
Make into a draught, to be taken two or three times a day.

In Nervous Headache.

197. ℞ Ætheris Sulphurici, ʒij.
Olei Ricini, ʒj.
Mix: a teaspoonful every one, two, or three hours.

In Tape-Worms.

198. ℞ Ætheris Sulphurici, ʒiij–vj.
Olei Terebinthinæ rectif. ʒij.
Mix: ten or twelve drops to be taken in sugared water, morning and evening.

In Gall-Stones.

199. ℞ Sp. Ætheris compositi, f3j.
Misturæ Camphoræ, f3j.
Tinct. Cardam. comp. f3ij.
Mix: make a draught, to be taken immediately, and repeat in two hours, if the flatulence continues troublesome.

In flatulent Colic.

228. ℞ Chloroformylis, gr. xv.
Syrupi flor. Aurant. 3x.
Aquæ flor. Tiliæ, 3iij.
Mix, according to art; dose, a dessert or tablespoonful.

In violent Colic, Neuralgia, or Asthma.

231. ℞ Chloroformi, ℥viij.
Sp. Vini Gallici, f3iij.
Aquæ, f3ij. Make a draught.

In Cholera.

232. ℞ Chloroformi, f3j.
Sp. Ætheris comp.
Tinct. Valerianæ, ana f3ij.
Aquæ, f3iss. Make a draught.

In desperate cases of Delirium Tremens.

233. ℞ Chloroformi, f3j.
Aquæ, f3iiss. Make a draught.

In the same.

243. ℞ Chloroformi, f3j.
Zinci Oxydi, 3ss.
Ol: Olivæ, 3j.
Cerati Cetacei, 3iv. Mix: make an ointment.

To sensitive Ulcers of the Rectum.

246. ℞ Ætheris Chlorici, 3j–iij.
Aquæ destillatæ, Oj. Make a lotion.

In painful affections of the Breast.

256. ℞ Bulbos Allii sativi incis. No. 3–4.
Spir. Vin. Gallici, f3xxvij.
Macerate for 36 hours, strain, and add
Decocti Bardanæ, 3viij. Make a lotion.

To prevent Baldness.

257. ℞ Aloes Socot. 3ij.
Saponis mollis (Ph. L.) 3ss.
Olei Menthæ pip. ℥v.
Make into 30 pills. Take one or two occasionally, as necessary.

In Sluggish Bowels.

258. ℞ Aloes Extracti, ℈j.
Pulv. Ipecacuanhæ, gr. viij.
Pulv. Zingiberis, ʒss.
Syrupi, q. s.
Make 16 pills. One to be taken before dinner.

In Indigestion with Costiveness.

261. ℞ Extracti Aloes aquosi, ʒj.
Scammonii opt. ʒss.
Bals. Peruviani gr. x.
Olei Carui, gutt x.
Mix: make 20 pills, of which two or three may be taken, according to circumstances, occasionally.

For Indolent Bowels in Aged Persons.

287. ℞ Decocti Aloes compos. fʒiss.
Extracti Glycyrrhizæ, ʒij.
Vini Aloes, fʒij.
Mix: one or two teaspoonfuls twice a day.

As a Laxative and Vermifuge for Children.

299. ℞ Aluminis, gr. xxiv.
Acidi Sulphurici diluti, ♏xij.
Syrupi Rhœados, fʒiv.
Aquæ puræ fʒiiss.
Make a mixture, take fʒiij every six hours.

In Whooping-Cough.

301. ℞ Aluminis, gr. xxv.
Extracti Conii, gr. xij.
Syrupi Rhœados, fʒij.
Aquæ Anethi, fʒiij.
Mix: take a dessertspoonful every sixth hour.

In the second stage of Whooping-Cough.

322. ℞ Pulv. Acaciæ, ʒss.
Pulv. Aluminis, gr. v
Mix with great care, and make a powder. To be applied to the nipple as often as may be necessary.

To Sore Nipples (applied after suckling).

323. ℞ Aluminis Pulv. ℈j.
Cretæ præparatæ, ʒj.
Mix carefully, and make a powder, of which a portion may be sprinkled on the nipple as often as occasion may require.

326. ℞ Aluminis, ʒiss.
Aquæ Rosæ, fʒviij. Make an injection.

In Gonorrhœa.

327. ℞ Liq. Aluminis comp. f℥ vj.
Aquæ destillatæ, ℥ vss.
Misturæ Acaciæ f℥ ss. Mix: make an injection.

In Gleet.

328. ℞ Aluminis, ℥ ij
Decocti fol. Juglandis, Oij. Mix: make an injection.

In Leucorrhœa.

329. ℞ Infusi Lini, f℥ xv.
Aluminis, ℥ ij.
Tincturæ Kino, ℥ j. Mix: make an injection.

In Cauliflower Excrescence of the Uterus.

333. ℞ Aluminis usti,
Sodæ biboratis, ana ℥ ss.
Medullæ bovinæ, ℥ j.
Olei Bergamiæ, gutt. vj.
Mix: make an ointment. Half a teaspoonful to be rubbed on the head, night and morning.

To Promote the Growth of the Hair.

376. ℞ Spir. Ammon. arom. f℥ ij.
Sp. Ætheris Nitrici, f℥ ij.
Tinct. Hyoscyami, f℥ ij.
Mist. Camphoræ, f℥ v. Take a fourth part thrice a day.

In Irritable Bladder, with Acid Urine.

408. ℞ Liq. Ammoniæ Acetatis, f℥ vj.
Spir. rectificati, f℥ ij. Make a lotion.

To Hard and Inflamed Breasts, &c.

485. ℞ Radicis Fœniculi,
Semin. Fœniculi, ana ℥ ij.
Cut, bruise, and mix. [Two or three spoonfuls to be boiled for some time in a quart of water, and the strained decoction taken by glassfuls.]

To Promote the Secretion of Milk.

725. ℞ Auri Cyanidi, gr. j.
Extr. Mezerei, gr. iij. [gr. viij.]
Pulv. Althææ, q. s.
Make into 15 pills. Give at first one pill, then two, then three, daily.

In Syphilis, Scrofula, Amenorrhœa, &c.

794. ℞ Infusi Berberidis, f℥ viij.
Sodæ Carbonatis, ℥ j.
Tinct. Calumbæ, f℥ ij.
Mix: two spoonfuls twice or thrice a day.

In Jaundice.

820 ℞ Decocti Bistortæ, f ℥ vj.
Decocti Papaveris, f ℥ ij.
Acidi Tannici, gr. xviij.
Mix: make a liquid, of which a sufficient quantity may be injected into the vagina, through an ivory syringe, four times a day.

In Chronic Leucorrhœa.

825. ℞ Boracis pulv. gr. xxx.
Decocti Pareiræ, f ℥ xij.
Make a mixture, of which a wineglassful may be taken every six hours

In Mucous Discharges from the Bladder, with Acid Urine.

935. ℞ Cambogiæ, ℈ ss.
Ferri Sulphatis, gr. vj.
Sacchari albi, ℈ j.
Olei Menthæ pip. gutt. iij.
Mix: make a powder; prepare six similar doses. One to be taken every four hours till they have sufficiently operated.

To Expel Tape-Worms.

976. ℞ Pulv. Cantharidis, gr. xij.
Extr. Hyoscyam. ℥ j.
Argenti Nit. gr. x.
Quinæ Sulph. ℈ ij.
Mix: make 40 pills. Take one, night and morning.

In Leucorrhœa of Nervous Females.

1343. ℞ Pulv. Ergotæ, gr. iij.
Plumbi Acet. gr. ij.
Opii pulv. gr. ¼.
Mucil. Acaciæ, q. s.
Make a pill, to be taken every second hour.

In Uterine Hæmorrhage.

1497. ℞ Gallæ pulv. ℥ j.
Camphoræ, ℥ ss.
Tinct. Opii. f ℥ ij.
Cerati. ℥ j. Make an ointment.

In Piles.

1684. ℞ Hydrarg. Cyanidi. ℈ ss.
Mellis Rosæ ℥ j.
Decoc. Hordei. Oj. Mix: make a gargle.

In Syphilitic Sore Throat.

1697. ℞ Hydrarg. Sulphureti rubri. ℥ ss.
Pulv. Olibani, ℥ ij.
to be thrown on a red-hot iron, and the diseased parts (only) exposed to the fumes.

In Herpes and Venereal Pustules.

IMPORTANT PHYSIOLOGICAL AND MEDICAL WORK!

Published by request of the Medical Faculty of the United States.

☞ A new Medical work, with the following title, has been published, and is now ready for delivery:—

The Science of Life; or, Self-Preservation.

A Medical Treatise on *Nervous and Physical Debility, Impotence, Sterility, Spermatorrhœa, or Seminal Weakness, etc.*; with Practical Observations on the Treatment of Diseases of the Generative Organs.

BY ALBERT H. HAYES, M.D.,

No. 4, Bulfinch Street, Boston (opposite Revere House),

Doctor of Medicine, Honorary Member of the American Medical Society, Vice-President of the Columbia College of Physicians and Surgeons at Washington, D.C., Professor of the Diseases of Women, Author of a Treatise on Diseases of the Throat and Lungs, late Surgeon in the United States Army, etc.

New and Revised Edition, nearly 300 pages. Cloth. Price, $1.00.

LIST OF THE CONTENTS:

FEMALE ORGANS OF GENERATION.—Structure, Functions, and Diseases; Symptons of Pregnancy, Treatment for Suppression of the Menses.

VENEREAL DISEASES.—Symptoms of Gonorrhœa or Clap, Swelled Testicle, Irritable Bladder, Gleet, Stricture, Symptoms and Treatment of Venereal Disease in its Local and Constitutional Forms, and the Use and Abuse of Mercury.

SYPHILITIC ERUPTIONS ON THE FACE.

DESTRUCTION OF THE NOSE BY SYPHILIS, AND ULCER ON THE CHEEK.

ANATOMY AND PHYSIOLOGY OF THE GENERATIVE ORGANS.—Puberty, Manhood, The Morale of Generative Physiology, Generative Physiology, Relations between the Sexes, Sexual Development, Empiricism.

THE PHYSIOLOGY OF MARRIAGE.—Aptitude and Inaptitude for Wedded Happiness, Perversion of Marriage, Avoidance of Calamity, Physiological Facts on Generative Capacity, on Wedlock and Offspring, on Physical Contrasts vs. In-Breeding, Evils of In-Breeding, Matrimonial Disappointments Exemplified and Treated, Conjugal Precepts and Friendly Counsel, Useful Truths; Physical Infirmity,—Its Causes and Cure; A Vigorous Posterity.

SPERMATORRHŒA.—Its History and Causes, The Causes of Evil, The Sources of Evil, Dangers of Hypocrisy, Self-Abuse, The Curse of Ignorance and its Avoidance, Proofs of the Extension of Vice, Venereal Imprudences Illustrated in their Effects, The Miseries of Imprudence, Miscellaneous Causes, Facts, and Philosophy.

SYMPTOMS OF SPERMATORRŒA AND IMPOTENCE.—Nocturnal and Diurnal Discharges, Multiplicity of Symptoms, Indications of Self-Abuse, Seminal Weakness, Influence of Spermatorrhœa, Effects on the Mental Faculties, Fatal Mistakes.

CAUSES AND EFFECTS OF SPERMATORRHŒA.—The Mental and Generative Machinery, Spermatorrhœa and its Victims, Self-Abuse and its Victims, Seminal Losses, Seminal Weakness and Sexual Impotence, Impotence and Sterility, Sexual Philosophy, Generative Capacity, The Curse of Self-Abuse, Impotence and Sterility, Generative Philosophy, Horrors of Self-Abuse, Sterility and Impotence, Affections of the Testicle, Miscellaneous Causes, Effects on the Testicles, and Physiology of the Organ, Plain and Practical Truths, Symptoms and Effects, Friendly Suggestions.

DETECTIONS OF SPERMATORRHŒA.—Ancient Ignorance and Errors, Indications for Detection, Danger of Mistakes, Qualification for Inquiry, Means of Detection, Importance of Examination, Mistakes of the Learned, Pathological Failures, Morbid Complications, Medical Errors, Means of Cure, Cure for Body and Mind.

GENERAL REMARKS ON THE TREATMENT OF SPERMATORRHŒA, ETC.—Urinary Indications, True Principles of Treatment, The Author's Principles, Inviolable Secresy and Certain Relief.

REMARKS OF THE PRESS.

CERTIFICATES.

TO PATIENTS AND INVALID READERS.

COURTSHIP AND MARRIAGE lie at the foundation of all human happiness; and upon the wise management of these matters, depends the welfare of the community. By studying Dr. Hayes's work, the young will be enabled to prepare themselves for matrimony in such a manner as to secure their own felicity, and render unnecessary the much-abused process of divorce.

For sale by the Author, No. 4, Bulfinch Street, Boston.